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Indianland

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Wonderland

OLIN D. WHEELER.

ONCE ROAMED BY THE
SAVAGE INDIAN AND
THE SHAGGY BUFFALO

NOW

DOTTED BY RANCHES,
TOWNS, AND CITIES, AND
CROPPED BY COUNTLESS

FLOCKS AND HERDS.

A Region of . . .
Wonderful Phenomena,

REACHED BY THE NORTHERN PACIFIC RAILROAD.

Illustrated.

Copyright, 1894

By Chas. S. Fee, General Passenger and Ticket Agent
Northern Pacific Railroad, St. Paul.

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ILLUSTRATIONS.

Old Jesuit Missions, Montana and Idaho	<i>Frontispiece.</i>
St. Paul and Fort Snelling,	Opposite page 12
Minneapolis,	" " 15
Bad Lands, North Dakota,	" " 18
Yellowstone Valley and Crazy Mountains,	" " 21
Helena, Montana,	" " 28
Scenes on the Butte Air Line,	" " 31
Lake Chelan, Eastern Washington,	" " 34
Mount Tacoma, 14,444 feet high,	" " 37
Detroit Lake, Minnesota,	" " 40
Harvesting Scenes in Red River Valley,	" " 43
In Yellowstone Park,	" " 50
Norris Geyser Basin, Yellowstone Park,	" " 53
Upper Geyser Basin, Yellowstone Park,	" " 60
In Yellowstone Park,	" " 63
Grand Cañon, Yellowstone Park,	" " 66
Flathead Indians: The Old Church Altar,	" " 69
Butte City, Montana,	" " 72
Flathead Indian Agency, Jocko Valley, Montana,	" " 75
The Clark's Fork Region, Montana,	" " 82
Spokane, Washington,	" " 85
Northern Pacific Dining Car,	" " 88
Northern Pacific Sleeping Car,	" " 91
The Yakima Valley, Washington,	" " 97
Alaskan Scenes,	" " 100
Indian Avenue, Sitka, Alaska,	" " 103

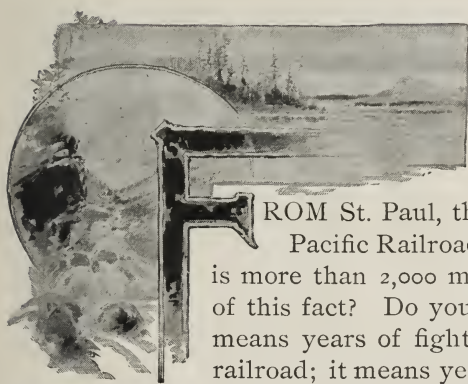
M A P S.

Yellowstone Park,	Opposite page 3
Showing the Irrigation Canals of the Yakima Valley,	" " 94
Northern Pacific Railroad and Connections,	" " 108

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FORWARDED TO ANY ADDRESS
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INDIANLAND AND WONDERLAND.

ON TRAVEL IN GENERAL.



THE NORTHERN PACIFIC RAIL-
ROAD—COUNTRY TRAVERSED
BY IT—THE ADVANTAGES DE-
RIVED FROM TRAVEL.

FROM St. Paul, the eastern terminus of the Northern Pacific Railroad, to Portland, its westernmost point, is more than 2,000 miles. Do you catch the full import of this fact? Do you understand all that it implies? It means years of fighting for the privilege of building a railroad; it means years of vain endeavor to enlist capital in the project; it means almost abject failure after a start was made by the collapse of the banking syndicate that engineered the financial part of the scheme; it means slowly threading its way over the wide plains and upland valleys of Minnesota, Dakota, and Montana when their principal inhabitants were wild buffaloes and wilder Indians; it means the tunneling of stupendous mountain ranges and the bridging of innumerable rivers; it means hewing a pathway through the lofty forests of the Pacific Slope; it means the expenditure of millions of dollars, and during the execution of it an undaunted spirit, an indomitable perseverance, an undying faith.

The Northern Pacific Railroad is now an accomplished fact. The region it traverses, once decried as a cold, barren, useless zone, now possesses the largest farms in the world, the greatest mines in the world, the noblest forests in the world, and the bravest people in the world.

The end of our Civil War meant that this country was to endure as a Nation with a big N, and not as a confederation to be dissolved at pleasure; that it was to be "a government of the people, for the people, by the people." The initial cause of that war has been, and always will be,

ascribed to slavery. Why, however, even with slavery as the bone of contention between the sections, was it necessary to proceed to armed conflict to settle the question? Purely and simply because of an utter misconception largely, on the part of both South and North, as to spirit and feeling each of the other. Had there been that intimate knowledge of the institutions, the resources, the sentiments, of the mass of the people of each section which comes from EXTENDED TRAVEL AND INTERCOURSE, the extinction or extension of slavery would never have passed to the arbitrament of arms. The Civil War is now, to many, a reminiscence, but the dangers resultant upon sectional misunderstandings are by no means gone, as is seen in the consideration of every tariff and currency bill before Congress.

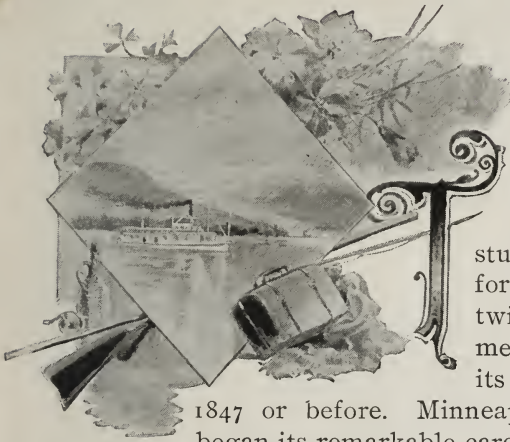
What then is the preventive, in great measure, to future difficulty? TRAVEL, INTERSTATE and INTERSECTIONAL TRAVEL, based on ardent patriotism. Sink first State selfishness, and recognize the fact that what benefits the whole benefits a part. Then let the people of the South travel in the North. Let those of the Pacific Coast go and view the sea-coast resorts of the Atlantic, and the nooks and corners of historic New England. The sturdy Northmen of the region of the Great Lakes, the Dakotas, and Montana make acquaintance with the genial clime of Florida, of New Mexico, of California. And above all let the thousands who throng over Europe, spend their ducats in viewing the wonders of the unrivaled Yellowstone Park, gazing upon the snow-crowned head of Mount Tacoma, cruising along the glacial shores of scenic Alaska; while those of the East, leave the valleys and glens of New York and New England, and hie themselves to the life-giving air of the Minnesota Lake Park region, ride over the Montana cattle-plains, or steam o'er the Kootenai Lakes, the gorge-like Lake Chelan, or the lovely Lake Pend d'Oreille.

In a general way the country tributary to the Northern Pacific Railroad may be segregated into three grand divisions.

First, the broad prairies and plains which stretch in magnificent panorama, and eloquent of the future, from the Father of Waters to the Rocky Mountains. Next, the mountain region, stretching from the grim old summits of the Rockies on the east to the pine-clad peaks of the glorious Cascades on the west — a region of grandeur, of inspiration. Finally, the rain-washed, sun-kissed hills and valleys of the Pacific Slope, redolent of pine and balsam, vine and orchard; the promised land to many a weary emigrant since the days when the valiant Whitman, after his long, unequaled, and dangerous ride to the East, led back to his beloved Oregon and the far Northwest his train of emigrants, and saved to our country that magnificent domain, the Puget Sound region.

AS WE GO ROLLING ON.

THE COUNTRY AND CITIES OF
THE NORTHERN PACIFIC AS
SEEN FROM THE TRAIN—ST.
PAUL—MINNEAPOLIS.



THE sobriquet "Twin Cities," now so commonly applied to these sturdy Northwestern cities, is an unfortunate misnomer. They are not twins at all, in anything like a correct meaning of the word. St. Paul dates its existence as a river hamlet back to 1847 or before. Minneapolis (first known as St. Anthony) began its remarkable career in 1856. The former has always been an important settlement and town of the Northwest. At the head of navigation of the Mississippi River in the days when intercourse with the outside world was carried on only by means of the Father of Waters, this fact of itself sufficed to render it a well-known and important point from its infancy.

In driving about the city one will be impressed with the many fine and striking views obtained. The Indian mounds on Dayton's Bluff, and Crocus Hill on St. Anthony Hill plateau, are two of the finest in the city proper, while from West St. Paul, across the river, many and varied views of the river and the rolling country stretching back from it are found.

Minneapolis owes its primary existence to the fine water-power afforded by the St. Anthony Falls. In the early days of the great milling industry that has made the city noted, this water-power was of supreme importance. An important factor still, steam has yet come in to assist in the grinding of the millions of bushels of wheat that annually pass through the many roller-mills located here.

St. Paul and Minneapolis have long ago put off their swaddling-clothes, and are now great metropolitan cities. Their business and office blocks are equal to those found anywhere. Extensive systems of electric railway connect the cities and extend to remote portions of the suburbs.

This is a great educational country. Besides the State University in Minneapolis, there are situated between the two cities other colleges. Prominent among them are Hamline University, a Methodist institution; McAllester College of the Presbyterians, and St. Thomas of the Catholics. The German Methodists also have a college at St. Paul Park, a suburb of St. Paul.

DULUTH—THE SUPERIORS—ASHLAND.

At the head of navigation of that chain of water emeralds, the pride of every true American, known as the Great Lakes, lie three ambitious young cities. I say young cities, for as cities they are young, but as settlements, trading-posts, etc., they are somewhat ancient.

Although, really, to all intents and purposes they are members of the same family, yet there have been the usual family jars, caused mainly because of an agreement to disagree among themselves as to which was the "chief stone of the corner." I am not at all sure that they have yet settled satisfactorily this mooted question. Certainly I do not propose to attempt it.

DULUTH.

Duluth, named from an old-time French explorer, Du Luth, was for long years a quiescent, modest little burgh. Its first real notoriety came, strangely enough, from a point far distant from the town itself, the Capitol at Washington. Proctor Knott there delivered a humorous speech which established the name and fame of the embryo city. It has never gotten over the effect of it. It soon commenced to grow, and has kept at it most astonishingly ever since.

The traveler that visits Duluth expecting to see a rough, uncouth, wild Western city, as goes the phrase, may prepare for as great a surprise as came over Rip Van Winkle when awaking from his little twenty years' nap.

SUPERIOR.

West Superior—now consolidated with old Superior and South Superior—lies on St. Louis Bay just across from Duluth. The two places are connected and numerous trains run between them, making communication easy.

West Superior has enormous coal docks, where, during the summer months, a fleet of steamers unload the coal mined in Pennsylvania and Ohio, that is to be consumed during the winter months throughout the Northwest.

It has also large elevators, the celebrated McDougall Steel Barge Works—where the "whalebacks" are made—and a very fine union passenger station.



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MINNEAPOLIS.

ASHLAND.

On the shores of Chequamegon Bay, with the beautiful Apostle Islands in the distance, is Ashland, Wis., a city of perhaps 14,000 people. It is a great ore-shipping point for the iron ores of the Gogebic Range. Long ore docks are seen here. Ashland is also a summer resort, especially for hay-fever victims.

On Madeline Island, one of the Apostle group, is the old and interesting La Pointe Mission, established in 1665.

ST. CLOUD — LITTLE FALLS — BRAINERD — JAMESTOWN.

From St. Paul and Minneapolis, the Northern Pacific Railroad follows the left—eastern—bank of the Mississippi River, the great Father of Waters, to Little Falls. At St. Cloud, passed en route, there are large granite quarries, and the Minnesota State Reformatory is also located there. Little Falls is the center of large lumber interests. The Weyerhaeuser Syndicate has here one of the most complete saw and lumber mills to be found probably in the whole United States.

At Little Falls the railroad divides, one portion running northward to Brainerd, a vigorous little city on the margin of the pine belt which stretches up into the Lake Itasca region. From thence the road—which at Brainerd meets the Duluth branch road—runs westward to Staples.

The main line of railroad crosses the Mississippi for the last time at Little Falls, and thence runs northwestwardly to Staples, where the line from Duluth and Brainerd makes junction with it.

From Staples, the road winds across the Lake Park region, then crosses the Red River Valley to the James River Valley. This valley is a rich, agricultural one, of which Jamestown is the principal town. It is the seat of the North Dakota Insane Hospital, and a prosperous and attractive place. It is also the junction point of two branch roads, one extending down the James River Valley, the other to Lake Minnewaukan.

BISMARCK — MANDAN — HEART RIVER VALLEY.

At Bismarck the Missouri River is reached. The river is crossed upon a bridge which is one of the interesting features of this part of the road. It is built of wrought-iron and steel, and cost \$1,000,000.

Across the river from Bismarck lies Mandan. These two places have always been important stations. Bismarck is the capital of North Dakota and an outfitting point for a large extent of country. Steamers run from here to points on the Upper Missouri River, and numerous stage lines radiate from it as a center.

Mandan is a railroad division terminus, and there are large machine-shops located here. A few miles to the south is Fort Abraham Lincoln, now abandoned. It was from this post that General Custer started, May 17, 1876, on the ill-fated expedition against the Sioux that terminated in the battle of the Little Big Horn June 25th following, where Custer and a large number of his officers and men lost their lives.

The railroad winds away from the Missouri by the valley of the Heart River. The Heart Valley is a decidedly interesting one, full of pretty glimpses of grass-covered bluff and sinuous river.

THE YELLOWSTONE VALLEY—ITS TOWNS AND FINE SCENERY.

Since the wonders of the Yellowstone Park were made known, and the great wars with the Sioux Indians which preceded, included, and followed the wiping out of Custer and his command, this region has become historic ground. It includes, besides the Yellowstone Valley, the valleys of the Powder, Tongue, Rosebud, and Big Horn rivers, which all debouch into the Yellowstone.

The valley of the Yellowstone affords a great deal of instructive scenery. The valley varies greatly in width, being at times quite narrow, and again very expanded. One prominent feature is found in the bluffs which have been formed by the river cutting its way, or by the upheaval of the strata and the subsequent erosion which has taken place. In some cases these bluffs form long lines of palisades, at the base of which the railroad runs. Fine stretches of valley are seen, which make good farms and ranches for the settlers whose little log houses are frequently seen ensconced among trees.

Through all this shifting panorama the green river holds its way, swinging at its own sweet will from side to side, frequently rolling along beside the track in long, winding reaches, then suddenly moving over to the farther side. Its green color invests it with a charm peculiar among Western rivers.

The traveler can find much food for reflection, besides seeing that which is deeply interesting in itself, in the arrangements at the stations for holding, caring for, and shipping the immense droves of cattle that roam the country miles back in the hills and mountains, out of sight.

Miles City and Billings, the former the county seat of Custer County, Mont., and the latter the division terminus of the Yellowstone and Montana divisions, are two important shipping centers for Montana cattle. Both are thriving towns, and a day or two spent here at the proper season will give the tourist a chance to see interesting features of the cattle business.

Glendive, Big Timber, and Livingston are other important towns.

In the upper part of the valley a most impressive sight is the Crazy Mountains, lying to the north. This range, a massive and palisaded group of crags, is seen in great majesty in the vicinity of Big Timber, where the foreground is an unusually pleasing portion of the valley.

To the southward another majestic cluster of peaks is seen as Livingston draws near. These are called by many the Snowy Range, by the official maps the Absaroka Range, a portion of the mountain masses forming the northern barrier to the Yellowstone Park. For some miles we have been skirting the outliers or higher foothills and slopes of this range, and a rugged set of hills they are.

WHERE CUSTER FELL—THE DARK TRAGEDY OF CENTENNIAL DAYS RECALLED.

From Custer Station the stages run to Fort Custer and Custer's battlefield to the south.

I remember as though it were but yesterday, the awful shock that possessed the country when the sudden tidings were flashed over the land, that Custer and two hundred officers and men had met the grim chieftain death, at the hands of Sitting Bull and his Sioux braves.

It was during the Centennial Exposition, and for a time the interest of people seemed to drift from Philadelphia, to those buttes and hills on the banks of the Little Big Horn River in far-away Montana.

The ride to the battlefield from Custer Station on the railroad is a very interesting one. It is a trip of about forty miles, and for the entire distance is over the Crow Indian Reservation.

Soon after leaving Custer Station the road climbs out of the Yellowstone Valley and winds up on to the high bench of the western side of the Big Horn River. For mile after mile it follows the windings of the stream, now on the bench and now down in the valley, among cottonwood groves or thickets of bullberry bushes. Sometimes the river is ten miles away, and again we roll alongside its banks so near that one can jump from the coach into its muddy current. Great hay ranches are passed, owned by the Crows, and their log huts are seen at frequent intervals.

After thirty miles' ride Fort Custer looms up before us. It is visible miles away, and occupies the southeastern angle formed by the junction of the Big Horn and Little Big Horn rivers. Crossing the former on a pontoon bridge, we leave the Big Horn and follow the Little Horn Valley. Even finer than the former is the latter valley, and the road now leaves the higher bench and follows the level, floor-like bottom.

Nearing the Crow Agency, a large, wire-fenced field at the left holds a great number of horses and ponies, and near by is an encampment of Indians. They are at work, under the direction of an American civil engineer, excavating an enormous irrigating canal. It seems anomalous to see them using the most approved scrapers, and taking the dirt from the center and bottom and depositing it along the sides of the canal. When the system is completed it will have cost several hundred thousand dollars.

From near this spot the first glimpse of the battlefield is had. Although four miles away, yet the topography of the spot stands fully revealed.

At the northern end of a rather prominent ridge a slight knoll rises, and we can discern that there is even something more than this. It is the Custer Monument, planted on the most commanding point of the ridge, and at the spot where Custer and most of his officers and men went down. There Custer himself, Yates, Smith, Tom Custer, Cook, and others fell together. As the stage rumbles ahead, our eyes remain riveted on the spot, and the details of the fearful tragedy enacted there come slowly back to us. Can it be possible that this lovely, peaceful scene before us is the same wherein such carnage was once beheld? It seems impossible.

The battlefield is now a national cemetery well fenced with wire, and at different spots in it interments have been made of soldiers who were killed in the Northwest in other Indian fights. Many bodies originally interred at old Fort Phil Kearney, Wyoming, Fort C. F. Smith and Fort Shaw, Montana, have been reinterred here.

Since the battle this country has been given to the Crow Indians, and a fine reservation it makes. Within a couple of miles of the battle monument is located the agency, which makes quite a settlement. The two most conspicuous objects are the flagstaff, with the stars and stripes flying, and a fine brick school-house. Besides the agent and his clerical force, there are also a number of teachers, a physician, and the usual necessary employés. A tavern, two or three stores, and several dwelling-houses are also found. Indian police are constantly on duty, but find little of a disagreeable nature to keep them employed.

LIVINGSTON—BOZEMAN—BOZEMAN TUNNEL AND ROCK CAÑON— HEAD-WATERS OF THE MISSOURI.

Livingston, a pushing, thriving little city, is situated in the midst of an attractive scene. As the train moves onward, following the line of the Park branch road, one sees in well-framed perspective through the "Gate of the Mountains"—as some term the cañon from which issues the Yellowstone River—the western slopes of the Absarokas.



BAD LANDS, NORTH DAKOTA.



CRAZY MOUNTAINS.

CASTLE MONUMENT.

INDIAN VILLAGE.

YELLOWSTONE VALLEY AND CRAZY MOUNTAINS.

Gradually ascending, Bozeman Tunnel, over 3,600 feet long, is reached. Here we are much higher above the sea than one would naturally think. The highest point of the floor of this tunnel is 5,565 feet above old ocean, which is seventeen feet higher than we will be when we arrive at the more celebrated Mullan Tunnel, beyond Helena.

Along this part of the road some of the cañon scenery is decidedly striking.

Rock Cañon shows some very original — if the term may so be used — rock-forms. Large rounded domes, capped pinnacles and spires project high above, while alcoves and cave-like recesses are visible. At one point the strata have been tilted on edge so that a dike-like ridge hundreds of feet long is seen running up and down the mountain's face.

Leaving Bozeman, a thriving little city of several thousand inhabitants, the wide plain of the Gallatin Valley, noted for its richness and fertility, opens before us. The mountains rise high above it on all sides, inclosing within their ribbed flanks bottom-lands of great richness and seemingly as level as a floor. The Gallatin, like so many other localities on this road, is a historic one. Within its sacred precincts the great Missouri River takes its rise. This is formed from the Gallatin and Madison rivers flowing from the east and south, and from the Jefferson coming from the southwest. The meeting-point is in the midst of a beautiful plain, and the immediate locality is aptly characterized by the term the Three Forks of the Missouri.

The Upper Cañon of the Missouri is soon reached, and for twenty miles or more the scenes that greet the eye as the train rolls through the gorge, call forth exclamations of delight from every true lover of nature.

HELENA.

Helena is the capital of Montana. Like many other places in the State, it owes its existence to the discovery of gold — in a gulch which is now become the principal street of the city. Unlike many other places once known of all frontiersmen and now "none so poor to do them reverence," Helena has not declined with the decline of its placers.

It is built upon the slopes of Mount Helena, faces to the north, where many miles of plain and mountain are spread before it, boasts good public buildings, and possesses many private residences that bespeak not only wealth but culture and refinement.

It is indeed a lusty place. 'Tis true there are no ten-storied buildings, because it does not need them; if it did, it would have them. It is just as easy to build horizontally as vertically, costs no more as yet, and is much more convenient. Besides, there is plenty of ground.

The traveler who can afford a day or two to stop here will be amply repaid.

OVER THE ROCKIES.

From Bozeman the traveler has the option of crossing the Rockies either via Helena or Butte. The main line of road runs via Helena, and the mountain scenery is impressive. In long, spiral-like curves the hills are climbed, now hugging closely the cliffs where the roadway has been blasted out, and then shooting "across lots," as it were, where the material shattered from the mountain-side is utilized to build an embankment across a ravine. Very slowly does the train climb skyward, pulled by two huge iron horses, whose groans and snorts show the stress put upon them. Through the Mullan Tunnel, nearly 4,000 feet long and over 5,500 feet above the sea-level, the train glides, and then slides "down the hill" into the valley of the Little Blackfoot, and then the Hell Gate Valley and Cañon. This valley—named in very poor taste—is an exceedingly pleasant one, with many lovely ranches scattered through it.

THE BUTTE SHORT LINE.

If one elects to go via the Butte route, he will find a bit of road and country worthy his attention. The rails first ascend the valley of the Jefferson River, and a charming valley it is. One of the interesting objects, seen on the left of the track in the Jefferson Cañon, is a placer-mining flume. The way this flume is hung to the abrupt, and in places vertical, sides of the mountain will seem to many, as it indeed is, a tremendous feat in engineering. It is matched by an equally astonishing one in railroad engineering.

Before us rises a solid range of granite. Washed and cut in all directions by cañons, were it not for the indomitable energy of mankind, one would think that "to be or not to be" would speedily have been resolved in the negative. This piece of work is a triumph of human ingenuity and determination.

The view as the train rises above the hills is wild and exhilarating. Mountain ridge and valley, rock and tree, ravine and knoll are spread around in wild confusion and rugged grandeur.

BUTTE.

Plunging down into the Silver Bow Valley, Butte, the great mining city, is reached. The evidences of its calling and importance are everywhere seen. It is not a city of seven hills perhaps, but it is a city set upon a hill that can not be hid. Indeed it would strenuously object to

being hid. Modesty is not a characteristic of the average Butteite in this respect. To him there is no place like Butte—not even home if one's home happens to be elsewhere. To him who has time to stop here there is much to be learned that will be valuable and instructive.

Leaving Butte via the Montana Union Railroad, the train follows the Silver Bow and Deer Lodge rivers through the beautiful valley of the latter to Garrison, where the Northern Pacific main line is again reached.

The Silver Bow Cañon, just beyond Butte, is traversed, and Anaconda—some distance to the left—and Deer Lodge passed en route.

MISSOULA—VALLEY OF THE BITTER ROOT—FLATHEAD INDIANS— JOCKO VALLEY.

The Hell Gate Cañon and River debouches into a magnificent plain, the foot of the noted Bitter Root Valley. As a site for a splendid city it is simply unsurpassed. Breaking out from the cañon and mountains into the wide plain, the Hell Gate River sweeps majestically across the extreme northern limit of it, hugging closely the Mission Range to the north. At the western side of the valley the Bitter Root River combines with the Hell Gate, and together, and now under the name of the Missoula River, they flow westward between high mountains. The northern end of the valley is perhaps six miles or more wide. The great opening in the mountain is rather triangular in shape, with the apex of the triangle many miles up the valley to the south. Here is a city, laid out and built up in perfect harmony with its location, as is evidenced by the tasteful manner in which the place is planned and the character of its business blocks and residences. Telephones, electric lights, and water supply are found even to the remote suburbs of Missoula.

The mountains literally hem them in. Immediately to the northeast is a bare hill that is startling in its resemblance to an animal. It is a huge, recumbent elephant, the hind quarters of which form the northern end of Hell Gate Cañon, around which the railroad curves as it issues from the cañon. The mammoth—Jumbo, as it is appropriately known—reclines with head to the north and trunk stretched out beyond him. One eye is plainly seen, and one hind shoulder is visible.

Down in the south, sharp, decisive, with a steep, rocky escarpment facing us and a long ridge descending from it, is Lolo Peak, of the Bitter Root Range, a noted landmark. This overhangs Lolo Pass, through which Chief Joseph came in his famous retreat from General Howard in 1877, which terminated in the battle of the Bear Paw Mountains, October 5th, where the brave and able chieftain was captured with the rest of his tribe, when almost within reach of freedom just across the Canadian border.

At the southern extremity of the valley on the banks of the Bitter Root River, and with the range serving as an effective background, is Fort Missoula, a pleasantly located military post.

Several interpretations of the meaning of the word "Missoula" are given. Father Guidi, a priest of long residence in the country, gave me what he considers the true one, which also indicates the manner in which the Hell Gate Cañon and River were christened.

The spot where Missoula is located was once the scene of conflicts between the various tribes of Indians. The Flatheads and Blackfeet were deadly enemies, and presumably may have fought over this lovely spot. At any rate, the ground just at the mouth of the Hell Gate Cañon (formerly Hell's Gate) was covered long ago with skulls and human bones.

The word "Isul" is an expression that means surprise mingled with horror, and was given to this spot from the appearance noted above, being derived from the further expression, "*Isul! Resemble la porte de l'enfer*," meaning "Isul"—horror, etc.—"This looks like the gates of hell." It was not difficult to form from Isul the word "M-isul-a" or "Missoula," nor strange that Hell's Gate should have become indelibly associated with the mouth of the cañon, and from this have been extended to the entire cañon and river.

Away back in the early years of the century the now historic valley of the Bitter Root was the centripetal point, the locus, of a tribe of Indians. Flatheads they were called, and are now, but the reason for this designation, so far as these particular Indians are concerned, does not appear.

Two things they assert with persistence: First, that they *never* flattened the heads of their infants; and no flatheads are seen among them. Second, that the hand of no member of their tribe was ever raised against the white man; and here again they seem unquestionably to speak the truth.

The real name of these Indians, and the one by which they are known among themselves, is Selish. From whence it is derived or what it means none of those now living seem to know.

Here in this wide and glorious domain, with its unsurpassed climate, with game of all kinds and fish in abundance, save for their bloody wars with their enemies the Blackfeet, the Flatheads, or Selish, lived happy and contented, and a finer valley home Indian never had.

Upon one side was a spur of the Rockies, rolling and graceful, and on the other, the massive Bitter Root Range rose to immense heights. Cleft at intervals of a few miles by profound gorges that extended nearly from summit to base, from whence issued numberless streams as clear

and pure as ever flowed from mountain fastness; with bench-lands curving out from the mountain-wall to the unequaled bottom-lands upon the river itself; with mountains, cañons, foothills, and bottoms, luxuriantly timbered and carpeted with bunch-grass, and with warm Chinook winds to ameliorate the climate, it was an Indian's paradise.

From Missoula the Northern Pacific Railroad leaves the valley of the Missoula River, as it is here termed, and climbing about among the mountains, crosses the Mission Range through the Coriacan defile, and swings over into the lovely valley of the Jocko. In making this climb the road is carried through one of the most touching and finest bits of mountain scenery to be found anywhere. As the road twists about in long and graceful curves over trestles of wonderful lightness and strength, the changing panorama draws forth expressions of pleasure and admiration for an Alpine view of the gentler sort, characterized by a decided lack of those sterner features usually attributable to such surroundings. It is an agreeable change, a pleasant relief, a delightful sensation. As the train speeds down the western slope and the valley of the Jocko unfolds itself, the traveler's admiration grows no less. A beautiful prospect of smiling valley, backed by dignified mountain-walls, can not fail to enthuse the spectator. When at length the side of the stream, the noisy, swirling, rollicking Jocko itself, is reached, and the train whirls around its many bends, opening new vistas at every turn, the scene is indeed one of an enchanted valley.

Before the actual descent of the mountain is done, from the car windows we can see over to the right, across the broad grassy space a collection of white buildings. Anon, moving figures are seen in the distance, then more of them, and nearer at hand. Most of them are on horseback, and soon the strangely accoutered figures, and the splashes of color about them, suggest the noble red man. Such indeed they are. We are now traversing the southwestern portion of the glorious Flathead Reservation. The buildings we have noticed are those of the agency, where for nearly a score of years Major Ronan directed the efforts of these people toward a more civilized life, and with some degree of success.

In the summer of 1893 Major Ronan was called to answer the summons of the great reaper. His death came suddenly and painlessly. His ability to control and manage Indians may best be judged by the fact, that through five administrations he retained a position too often the reward of political servitude. His Indians had confidence in him, and his influence over them was great.

The Flathead Reservation was established in 1855 by treaty made by Gov. Isaac I. Stevens of Washington Territory. It is walled in on three sides by high mountains, while on the north side the country is quite open.

The area of this tract is 2,240 square miles, or over 1,400,000 acres. While the region is largely mountainous, and excels in fine and contrasted scenery, there is much fine grazing and a goodly amount of irrigable and cultivable land within its lines, and it is also well watered. The Indians occupying it are the so-called Flatheads, the Koo-ten-ais, and the Lower Pend d'Oreilles, or Kal-is-pels, and they number about seventeen hundred.

At the time of the Stevens treaty the Bitter Root Valley was reserved for the Flatheads exclusively. In 1872 General Garfield, as a special commissioner, made an agreement with the Flatheads which resulted in a large number going to the Jocko Reservation.

At Arlee, the nearest railroad station to the agency, many Indians, gaudily decked out, are usually visible. This station is named after Arlee, the last war-chief of the Flatheads. He was also made head chief of the reservation by General Garfield, after the agreement made by Garfield and the tribe in 1872. Charlot, the head chief at that time, and a man of great force of character, refused to leave the Bitter Root Valley and settle on the new reservation. Arlee, the second chief, agreed to accept the terms of the new arrangement and removed to the Jocko Reservation, and was accordingly recognized by the Government as head chief thenceforward. So incensed was Charlot that he never after spoke to nor recognized Arlee to the day of his death. Arlee died within a year or two, honored and regretted among those who knew him. Arlee is the nearest approach the Indian can make to French "Henri" [Henry], which was the baptismal name of this chieftain. Charlot is, in the same manner, their pronunciation of Charles. Charlot has at last removed to the Jocko, and is again recognized as a chief. There is a strange inconsistency in this old Indian. A strong, uncompromising friend to the whites he has ever been, yet refuses to allow his children to attend school.

As the station at Arlee honors in its name the Indian chieftain now gone to his happy hunting-grounds, so too the point at which the train next stops commemorates the life, virtues, and good works of the noted priest and physician Father Ravalli, the friend and companion of the well-known De Smet.

From Ravalli the stages to the Kalispel and Flathead Lake country take their departure, making daily trips. This is also the point at which to leave the train for a trip to St. Ignatius Mission.

In December, 1893, I paid a visit to Mrs. Ronan at the agency. Here since her husband's death she still lives.

Stop for a moment, reader, as from swiftly flying train you look out across the valley to the cluster of houses, the agency, and reflect how much loyalty, self-denial, and heroism she has shown, to live here among a couple of thousand Indians for nearly twenty years, a helpmeet indeed

to him who is now gone. For years, almost bereft of the faces and society of her own kind and color, and yet longing, yearning, as she must have done, for the refinements, and comforts, and privileges of friends and society, has she not been brave indeed?

There is much of interest to be found hereabout. The houses of the agent and his assistants are comfortable, painted white, and with irrigating canals carrying water to the flower-beds and shrubs about them. Stables, sawmill, blacksmith-shop, warehouses, and storage-rooms for agricultural implements and annuity goods for the Indians are here. A school in charge of Ursuline nuns and a mission chapel of which Father D'Aste is the priest are close at hand.

Father D'Aste I had met the year before at St. Ignatius, and gladly renewed my acquaintance. He is a venerable man, with white locks about his temples, and has devoted his life to mission work in the far West. For years, and until Father Ravalli's death, he was the latter's faithful assistant and nurse at St. Mary's Mission in the Bitter Root Valley.

Scattered about the valley are the houses of the Indians. They are comfortable, fairly well kept in some cases, but in many decidedly otherwise in winter. The Flatheads have probably 10,000 or more horses and 5,000 or 6,000 cattle; no sheep. The reservation, it is claimed, is pastured to its full capacity.

In winter there are many deaths, from consumption and scrofulous diseases largely. This is owing to the stifling temperature of the houses and little or no ventilation. The women die faster than the men. As ranchmen and farmers the Flatheads are a success. It would be a matter of surprise to many people who think that the only good Indian is a dead Indian, to see the way some of the women handle sewing-machines.

I wish that those who continually rail at all efforts to educate and civilize the Indian could know Michael — pronounced Mīsh-el — Revais, the interpreter. Born and raised near Salem, Ore., he is fifty-nine years old. His father was a French Canadian, his mother a Kalispel Indian. For thirteen years he has been stone-blind, but one would scarcely know it.

In smoothness of diction, musicality of voice and intonation, ability to express his own thoughts and to comprehend yours, this man is a marvel, considering who and what he is. His face is that of a saint, benign, kindly, spiritual, almost rapturous. He is loved and respected by the white people of the agency to a remarkable degree.

The origin of the word Jocko, which applies to the river, valley, and reservation, is rather peculiar. An Irishman, by name Jacob Finley, early in this century had a ranch on what is now the Jocko River. The French Canadians who intermarried with the Indians called Finley by his

given name, using the French pronunciation of Jaco (Yahko). This soon became anglicized into Jocko, and thus it remains. The Indian name for the stream is Nlka. Finley became the father of seventeen children, and in 1862 his descendants are said to have numbered ninety-three.

It is well known that the Indian often interprets the ordinary events of life in a highly imaginative manner peculiar to himself. He surrounds them with a halo of imagery, often very beautiful indeed. I give herewith, in Mrs. Ronan's own language, a narrative of the manner in which her own daughter became possessed of an Indian name:

Her "white name" is Isabel, but the Indians call her Skū-kū-leil (Sunshine). It was in the month of February, 1887, that Skū-kū-leil came to gladden the hearts of her parents. Two weeks previous to her birth the weather had been cold and gloomy. In all that time the sun seemed to have vanished from his accustomed place. The Indians said, "The heart of the sun is sad or angry, and he has turned his face away from the earth." The morning after the little girl's arrival the sun shone out gloriously all over the land; then the Indians said, "Behold! the sun is pleased again since God sent upon the earth this little child; she has brought back to earth the sun, and so we shall call her Sunshine."

Well suited is Skū-kū-leil to the name the Indians gave her — a warm ray rests in her chestnut hair, soft is the light shining in her dark-gray eyes, and never did a child have a birthday gift of a nature more tender and sunshiny.

CLARK'S FORK OF THE COLUMBIA — LAKE PEND D'OREILLE

After meandering the Flathead Reservation and passing Ravalli, the railroad follows Clark's Fork of the Columbia to Lake Pend d'Oreille. This valley unfolds some very attractive types of scenery.

Near Paradise the character of the valley is such that the significance of this name will be well understood. The mountains, bold, grim, and cut by lateral cañons, rise high above. Below here the valley narrows, the mountains crowd together in sheer, scarped faces, wild and irregular, with a talus of granulated fragments of rock. At Horse Plains the valley again expands. This alternate contraction and expansion of mountain and valley continues. At some points the effects are very impressive.

Thompson's Falls is in the midst of scenes somewhat contradictory in character. The heights again retreating, the train speeds through alternate park-like spots and straggling patches of evergreen trees. The river is a noisy, tumbling stream, finally plunging over the falls, which can for an instant be seen from the train, and are well worth seeing.

Near Heron, above Cabinet Gorge, which is one of the most picturesque of spots, and should on no account be missed, on the side of the river opposite to the track, the range rises in long timbered flanks surmounted by scalped crests, forming a fine view. At another place a



HELENA, MONTANA.



SCENES ON THE BUTTE AIR LINE.

remarkable exposure of rocks at the summit of the bluffs startlingly resembles ruins of ancient castles.

At Hope, a "cliff-dweller" sort of a place, Lake Pend d'Oreille is reached. For a few minutes the train stops, and passengers can promenade the sandy beach beside the tracks, and look upon one of the most beautiful lakes of the West.

SPOKANE—TRIBUTARY COUNTRY.

Could one be transported blindfolded or in the dead of night, from the far East to Spokane, upon opening his eyes he would never imagine that he was in a city in the State of Washington, and over 2,000 miles from Chicago. Spokane is apt to belie the average Easterner's ideas of what constitutes a Western city. Wild and woolly may aptly enough describe some portions of the West, even some of its cities perhaps, but Spokane is not of that sort; so prithee go not there expecting to find the wild bronco-buster or the woolly sheep-herder cavorting about its fine streets or herding sheep upon its elegant lawns.

Spokane may be likened to the body of an immense grasshopper, the iron rails of its many railroads being its long, far-reaching legs.

From the northeast comes the main line of the Northern Pacific, and continues on to the southwest, thence to Puget Sound. To the west is the Central Washington branch, reaching the center of the Big Bend country. Eastward, cutting to its vitals the Cœur d'Aléne mining region, runs the Cœur d'Aléne branch. The Spokane and Palouse branch to the south penetrates the noted Palouse country, a wheat-belt as noted on the Pacific Coast as is the Red River Valley in the east.

Extending north, passing through the beautiful Colville Valley and touching the picturesque Kootenai country at Nelson, B. C., is the Spokane Falls & Northern Railroad.

All, great arteries of commerce, bringing to Spokane the ores and cereals and fruits of Eastern Washington and Idaho.

To the east and southeast of the Palouse region, tributary to the Spokane and Palouse line, is the Salmon River country.

This portion of Idaho is upon the eve of great development. There are known to be large deposits of gold and copper there, that are waiting only for organized and skillful prospecting, to reward a hundredfold, the efforts made to get at them. In this section also lies the Nez Percé Indian Reservation, from which it now seems certain that a half-million acres of first-class farming and grazing lands, will in 1894 be opened to public settlement.

LAKE CHELAN.

Over beyond the Big Bend country, across the Columbia River, is Lake Cheelan. It is a wonderful body of water wonderfully placed. It is the sort of lake that people rhapsodize over. Seventy miles long, two or three wide, over 1,200 — how much more nobody knows — feet deep; this is its “length, breadth, and thickness.” To describe it is quite another matter. Its bluest of blue water, serpentine course, the tremendous mountain-peaks — the Cascades on one side, the Methow on the other — that appear to lift themselves from a blue sea below to a blue ocean above, must be seen to know them.

Then what a place for the hunter! Elk, bear, deer, mountain-sheep are all easily tackled by the agile climber. But the best of it is the fact that the White or Rocky Mountain goat frequents the crags and precipices of the higher altitudes. Secure in these cloud-land defiles and sanctuaries, he bids defiance to pursuit, tumbling down the cliffs, leaping from crag to crag when danger threatens. Yet he is often caught — try your hand at it.

KOOTENAI LAKE.

Beyond the domain of Uncle Sam, to the northward of Spokane, in the Queen's dominions, is the Kootenai region. Notwithstanding that it is in British Columbia, it is largely peopled by Americans. The lodestone which attracts them thither is the mineral wealth in the mountains. To the sightseer this is a secondary matter.

There is therefore for him a long, tri-armed, narrow lake, girt about by high mountains, over whose trailless, glistening surface steamers ply, pushing from one little mining town to another.

The Spokane Falls & Northern Railroad takes you to Nelson, the largest town of this country, and located at the extremity of the western arm of the lake.

From this point a steamer tour of the lake is prolific of both health and pleasure. The lake is simply an expansion of the Kootenai River, and the ride of 150 miles or more for the round trip, discovers a great deal of varied and fine mountain scenery.

OVER THE CASCADES.

Four times does the Northern Pacific Railroad cross the mountains. First, between Livingston and Bozeman, where a high spur of the Rocky Mountains is ascended to a height of 5,565 feet above the sea; again, between Helena and Missoula, where the main chain of the Rockies is

climbed at an elevation of 5,547 feet; third, just west of Missoula, where the Mission Range, another branch of the Rockies, is crossed at an elevation of nearly 4,000 feet; a fourth time, west of Ellensburg, where the giant Cascades are passed, through the Stampede Tunnel, nearly two miles long and 2,885 feet above sea-level.

Although the altitude at which the railroad sweeps over the Cascades is only about one-half of that where it clears the Rockies, the scenery is incomparably finer. The range is heavily timbered; deep gulches and cañons penetrate deep into the heart of the mountains; the jagged peaks loom far aloft.

The slow approach to the summit dragged by another team of iron monsters hitched in tandem; the view from the car window over the wide waste of mountain billows, where a yawning gulf below or a towering cliff above intensifies the chaotic jumble about us; the plunge from daylight into night as the tunnel hides us from the world, and then the swift rush out, and down the mountain, racing time itself as we swiftly descend into the wild and weird gorge of Green River, forms an episode in the long journey to be remembered.

PUGET SOUND—ITS CITIES—ITS MOUNTAINS.

In 1774, and again in 1790, the Spaniards explored the Puget Sound. Two centuries before that Juan de Fuca had been there. Numerous islands and straits bearing Spanish names commemorate their achievements.

In 1792 came Vancouver, an Englishman, and did some more exploring. Likewise he also did a lot of naming. Among the more prominent names given by this individual was Puget Sound, after Peter Puget, one of his lieutenants.

It is only within a comparatively recent period that the Sound country has attracted attention. Since the completion of the Northern Pacific Railroad to the Coast this entire section has pushed ahead in commercial, agricultural, and industrial progress at a rapid rate.

The principal cities of the Sound are New Whatcom, on Bellingham Bay, at the extreme north; Victoria and Port Townsend, on each side of the wide Strait of Juan de Fuca; and Seattle, Tacoma, and Olympia, on the extreme south.

Victoria is in British territory, on Vancouver Island. Port Townsend is in Washington, located on high ground, rising gradually as it retreats from the water. It appears well from the steamer's deck. Olympia, the capital of Washington, is reached via the Gray's Harbor line of the Northern Pacific Railroad.

SEATTLE.

Seattle is one of the oldest places on Puget Sound. It enjoys a large commercial trade, and is also the seat of much manufacturing. The interests in steamship transportation companies are very large.

The city is laid out so that its business portion is almost wholly massed on the level strip of land lying next the bay. Its large business blocks and solid office buildings impress the visitor with a sense of substantial growth and financial solidity.

Back of the wholesale section rises the residence portion and the city in general.

As the terraces grow higher and higher, the city comes more and more into view, and presents a most effective appearance.

From Seattle's heights one has a fine view of the Olympic Range of mountains in one direction and of the Cascades in another. No one visiting the Coast can afford to miss paying a visit to this enterprising city.

TACOMA.

Situated at the head of that part of the Sound known as Commencement Bay, is a young city whose vigorous growth has surprised even its friends.

In 1880 an obscure village, in 1890 a large city—that in brief is the story of its rise.

Taking its name from the magnificent mountain under whose very shadow, nearly, it rests, it started on the highway to prosperity, aided by a musical and euphonious name that was sure to attract attention and make it known.

Its position on the bluffs is a commanding one, and it has been laid out and built up with great taste and judgment.

As a shipping port it ranks next to San Francisco among Coast cities, in its wheat shipments.

Its business structures are abreast of the times, and its private residences unusually tasteful and attractive.

Steamers ply regularly between Tacoma and Seattle and the upper Sound ports, Victoria, Port Townsend, etc.

MOUNT TACOMA.

Most justly celebrated among the Alpine monuments of our country is this old Nestorian, this "chief among ten thousand." And yet I think no one can fairly picture to himself a vision of the old monarch.

After years of mountain life, almost mountain worship, one might



LAKE CHELAN, EASTERN WASHINGTON.



MT. TACOMA, 14,444 FEET HIGH.

say, I was extremely anxious to see this noted old chieftain. I was not perhaps in the best trim to be impressed, I thought at the time. For weeks I had been clambering among the tangled forests; gazing upon the lakes, both frozen and open; climbing over the glaciers and snow-fields, and looking out across the bewildering array of bald peaks of the Lower Selkirks at Kootenai Lake: had sailed upon the waters of the peerless Lake Chelan, in Eastern Washington, straight in between two of the most stupendous mountain ranges, the Methow and Cascade, where it seemed as if the outer world were left behind, so lofty and towering were they, and I thought that my susceptibilities were possibly somewhat blunted.

Riding one evening through the streets of Tacoma, my attention was attracted to the most exquisite, ethereal, filmyspectacle of cloud imagery that I ever beheld. It was peculiar, unnatural. Diverted for an instant from its contemplation, when I returned to the airy feast I saw that intermingled with it, part of it, was the grand head and form of Mount Tacoma. The sight was one that can be but faintly pictured.

Before me for forty, fifty, sixty miles stretched a wide plain, rolling up into the tumbling foothills, which in turn, again, become the buttressing flanks and supports of the great range.

From out this vista of flat foreground and bulging mountain background, towered the big, white mountain. Clad in robes celestial, with a sweep indescribably grand, the very incarnation of strength, majesty, dignity, reposed the king of peaks, reaching heavenward 14,444 feet.

Far up toward the crest, the remnants of cloud-land which for days had entirely shrouded the mountain from view, now twined themselves about him in thin, tissue-like folds that produced an effect bordering on the supernatural. It was as if this portion of the great cone was concealed behind a veil of intangible lace, dividing it into two parts, and leaving the frosted head floating unsupported high above the earth beneath. It seemed unreal. It was more like the visions one sees in dreams than like the gigantic peak which stands there, silent, alone. The effect of such a sight, the lasting impression made, may perhaps be conjectured.

One may well imagine as he gazes upon this noble memorial of an age past and gone, that seems to pierce to the realms of infinitude above, that he is looking at the footstool of the Almighty God of earth and heaven, that through it he is brought into communion with his Maker.

It is worth a journey across the continent to see Mount Tacoma. I can conceive no mountain anywhere, more terribly impressive, more subjugating than this. Not terrible in the ordinary sense of the word, but so overpowering, so intensely real in the lesson taught of man's littleness and helplessness. It is an inspiration to witness such a sight. It uplifts man's moral nature, impels him onward toward a higher life.

A magnificent monument is Tacoma of an ancient time, an era when this now silent, spectral mammoth, belched forth from his blistered throat, a deluge of fire and steam, and smoke and molten débris. When there trailed down his heaving sides flaming rivers of lava, scorching, killing, destroying, burning, great writhing serpents of molten devastation.

Now it stands a whited sepulcher. Grand, magnificent, a source of wonder and admiration, a pean of godly power and greatness, yet a sepulcher, wherein are buried even now the surging, seething powers of fire and force, ever ready to break loose yet again and melt the glaciers and snow-cliffs which hang upon its sides, and restrained only by the power of Him who indeed can say, "Thus far and no farther."

This region has now by act of Congress, been set aside as a great Reserve, to be followed let us hope, by further action making of it a National Park. To what better purpose and uses can this wonderful spot be subserved than to preserve in their pristine freshness and purity, its noble forests, beautiful parks, flowery valleys, marvelous glaciers? To keep intact all the harmonic parts of a great scenic symphony, and then to add to nature's perfect work just enough of man's labor, that all the beauties of this rugged land of mountain and cañon, of ice and water, of flower and field, may be the more easily visited and seen, and that the true American may the more ardently exclaim:

My country, 'tis of thee,
Sweet land of liberty,
Of thee I sing.

PORTLAND.

Less than 150 miles south from Tacoma, at the junction of two great rivers in Oregon, is the oldest metropolis of the Pacific Northwest.

When the cities of the Sound came into being, Portland was already a city, wealthy and prosperous. The general prosperity of the Coast has not been at all to the detriment of this fine city. It has held its own in all respects against its young and enterprising rivals. It has doubled in size within the last ten years. It is a beautiful city, well built; a city of foliage, and lawns, and flowers. The mountain view from Portland is something unusually fine. The great Cascades rise high in the air, and five of its most noted peaks are in sight. Opposite the city stands Mount Hood, the pride of Oregon, and the special glory of Portland. This view has been pronounced one of the finest in the world. From Portland an interesting side trip is up the Columbia River to the Cascades and Dalles. In truth, there are many very pleasurable excursions from Portland, Tacoma, and Seattle for the tourist who has time and inclination.

THE LAKE PARK REGION.



ITS CHARACTER — GLACIAL ACTION — BATTLE LAKE — PERHAM — DETROIT CHAIN OF LAKES.

WE FIND here one of the most rolling and beautiful regions, not only in the State of Minnesota, but in the vastly larger United States. This is a sweeping statement. Still, I emphasize it, and any man or woman who can visit this locality and not say the same has little love for the marvelous and the beautiful in this most beautiful world that God has given us.

The Minnesota State Geological Survey, a competent authority certainly, asserts that there are in this land of "sky-tinted water"—the meaning of the word Minnesota—more than 10,000 lakes. Does it happen to strike you just what this signifies, not merely as to the large number of lakes, although that is phenomenal, but to go back to the causes which produced such a state of things? The presence of so many lakes within, comparatively speaking, so limited an area, usually means the former presence of glaciers. It means that the region in which the now glittering and peaceful lakelet is found was once covered with a vast ice-field, and that the face of nature has undergone a transformation scene more wonderful than the ordinary mind can conceive. This is precisely the case here. Parts of Minnesota and the Dakotas were once covered with one of the greatest glaciers of ancient times.

Within the territory now included in two or three counties in Minnesota, through the very heart of which the Northern Pacific Railroad runs, the phenomena resulting from this glacial period reached their highest culmination, and ergo, the number of lakes is here the greatest, and scenic display of this sort found its highest perfection in the Lake Park region.

How many of the average of mankind who read of glaciers and glacial action know anything about it? How is the glacier born—how does it live—how does it die—how can I tell that it has been—what traces of its existence does it leave? A body of ice, a living glacier, an iceberg that I can see, I know exists, but how am I to know that one has existed.

* * * * * * * *

Far out on the great plains of the West I am riding. About me the country has been fashioned into a vast stretch of plain and modulating hills. The horizon is limned with rugged mountains whose snow-crested peaks, falcion-like, flash back the rays of the sun-god, the Ra of the ancient Egyptians. Coiling about among the hills and over the plain is a long line of green that tells of running water. As the day draws to its close I turn my horse toward the stream, and find amid the leafy bowers that line its banks my resting-place for the night.

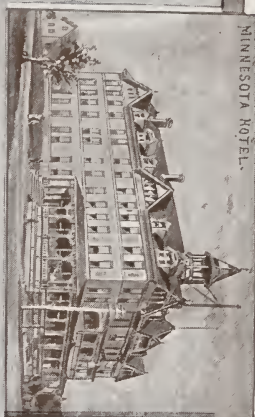
In wandering around I stumble upon a spot that rivets attention. Scattered here and there are the whitened skulls and bones, and the horns of huge animals. A little inspection soon shows them to be the remains of bison, the noble animal that long years ago, grazed and bellowed and fought upon the prairie round about. Again, I find the remains of conical huts constructed of long, slender, symmetric poles, evidently the framework of some sort of shelter for human beings. Near by or within the circle of the poles glistens an arrow-head of flint, or I find a piece of buckskin moccasin. The faintest sort of remains of an old, a very old, fireplace are found. I know what it all means. Not a living thing that ever belonged to these various discoveries is to be seen, but *I know* that here is an old Indian camp, where the carcasses of buffalo—so called—killed in the chase were prepared for the winter's supply of meat.

Strolling farther, I find a fresher fireplace. Charred logs and a few ashes are seen. Hard by on the ground are the reddish, faded remnants of pine-boughs that did duty for beds. Old fruit-cans lie scattered around. Not a sign of life, but yet *I know* that here have white men been, and that their bivouac was made long after that of the red man. The evidence of these facts is indisputable. So with the glacier. Gone, it yet has left the evidences of its former life to him who can read.

* * * * * * * *

To the glacialist there are two kinds of rivers—one the stream of water, the other the stream of ice. The one a fluid pure and simple, yielding, elastic, that adapts itself unerringly to the conditions of its environment; the other a congealed fluid, brittle, yet semi-viscous or fluidic in its nature like pitch and molasses-candy, and that is also largely amenable in its motions to the boundaries of its domain. The one is a liquid fluid, the other a frozen fluid.

MINNESOTA HOTEL.



A LITTLE CHURCH.



RAND McNALLY CO.

DETROIT LAKE, MINNESOTA.



HARVESTING SCENES IN RED RIVER VALLEY.

During the fall and winter snow accumulates in the mountains; in the spring and summer it melts and forms springs, rills, rivulets, creeks, and of these come rivers. The latter flow out from the mountains through the ravines and valleys which radiate from them. Thus is born the liquid river, or simply the river. Now, in very high mountains, the elevation depending more or less on latitude, this result does not follow. Here the snow falls heavier and lies deeper. Because of the great elevation and cold the thawing during the day is slight, and is followed by the freezing of the night. Thus, instead of the snow melting and running away as water, it becomes compacted and forms an icy, hard mass. In the course of long years this mass becomes enormous, and the pressure entailed upon the underlying portions of it is simply tremendous.

Obedient to this pressure, it begins to slowly move down the mountain-side, then through the ravines, gulches, and cañons, and thus out into the broader valleys, until it reaches a locality so low in altitude and warm that the ice or glacier melts. Now, if the temperature at this melting-point remains the same, the front of the glacier may remain here for ages; if it grows less, the glacier will again advance down the valley; if the temperature increases, the consequent more rapid melting of the glacier will cause it to recede farther up the valley, perhaps to disappear entirely.

Thus is born, thus lives, and thus dies the river of ice, or the glacier. As it plows its way down the mountains and through the gorges vast amounts of *débris* fall from the cliffs and mountains and find lodgment along the sides of the glacier. As the glacier moves onward the falling fragments thus form on its margins a continuous line of this *débris*. These lines are called *lateral* or marginal *moraines*, or moraines at the sides of the glacier. Where two or more glaciers run into each other they combine, coalesce, as the tributaries of a river run together, and these side or lateral moraines are then carried far in upon the middle portions of the surface of the new or larger glacier, and become *medial moraines*, or moraines of the middle. The larger glacier then has new lateral moraines from this point. This *débris* is carried upon the glacier to its terminal point or place of melting, miles distant perhaps, where of course it is tumbled off, dumped into one huge heterogeneous pile, as the ice melts. This accumulation is called a *terminal moraine*, or moraine of the terminus or end of the glacier. All this upon the surface.

At the same time strange occurrences are taking place within and at the bottom of the ice-stream. As the glacier reaches the lower and warmer levels, the sun causes the ice to thaw more and more rapidly on the surface. Streamlets are thus formed which swiftly eat a network of little channels in the ice. There are also formed vertical shafts, or *moulins*, which reach far down into the depths of the mass. Tunnels are

also formed, and ice-caves. Through these tunnels and subglacial channels the large quantities of water are carried away.

At the bottom of the ice-stream another process is going on. The immense pressure of the superincumbent ice causes a rasping, eroding, at the bottom that produces striking results. Its inequalities are toned down, its elevations cut away, its hollows filled up. The rocks and boulders are, many of them, rolled over and over, and become rounded and polished. Others, held in a vise-like grip, as they meet with other boulders or solid beds of rock, are scratched and ground—striated—and they in turn mark and furrow the rocks with which they come in contact.

Now, in observing these phenomena in connection with existing glaciers, glacialists have learned how to discover the remains of all glaciers and to determine their boundaries. Thus it is that we know that the beautiful Lake Park region has been in centuries gone by covered with ice. Its configuration and topography are the result of the ice-sheet which once covered it. The hills, and knolls, and ridges are the moraines, etc., left by the glaciers which here battled for supremacy, one from the northwest, the other from the northeast; and the beautiful lakes which bedeck its bosom, lie shimmering in the hollows scooped out by the moving ice or formed by the morainal deposits, technically known as kettle holes.

The Lake Park country thus becomes doubly interesting. First, from its innate beauty; second, from the causes that produced it.

The Northern Pacific Railroad penetrates this country at two points. From Wadena, a branch line runs southwestward that touches it near its southern rim. The traveler can take a sleeping-car at St. Paul or Minneapolis, sleep all night, and in the morning stop at Clitherall, Battle Lake, or Fergus Falls, where he will find scores of beautiful lakes.

At Battle Lake Station there is found right at hand one of the most beautiful lakes of the Lake Park region. The larger Battle Lake—as opposed to East Battle Lake near by—is about six miles long and two miles in width. Close at hand are Silver and Turtle lakes, and a half-dozen others, varying in character, while a little farther to the north is Otter Tail Lake, one of the largest lakes in Minnesota. Hotel accommodations at Battle Lake are excellent, and the fishing and sailing unsurpassed. Many pleasure-seekers from the South visit Battle Lake yearly.

At Perham, on the main line, there are several lakes near by, and many more a little farther away. To one who wishes a few days' sport with the rod, and is willing to forego hotels and be satisfied with good, plain, farm-house accommodations, Perham will prove very satisfactory.

The McDonald lakes are especially to be recommended. Nearer Perham than are the McDonalds lie Pine and Little Pine lakes, while a few miles out is Lake Sybil, one of the daintiest and most picturesque of lakes.

and the large Otter Tail Lake, heretofore mentioned, is within easy driving-distance. The country about Perham is unusually fine.

Farther west, on the main line of road, is the attractive little town of Detroit. The very name brings up a picture of wonderful beauty and freshness; means days of unalloyed joy and pleasure to many a resident of Minnesota. Situated on Detroit Lake, this little city is the starting-point to one of the most delightful lake or water tours to be found.

Here, O weary traveler! who for days may have been speeding from Pacific's glistening strand toward the rising sun, or from Atlantic's rock-girt shores, have been whirled over mountain and prairie, immured within the narrow walls of a Pullman castle, elegant and finished 'tis true, yet narrow and confining — here, I say, stop you for the nonce. Break away, out into the breezy freshness of God's ice-built hills; breathe the invigorating air that Minnesotans breathe; take the little steamer that like a swan floats upon the bosom of the lake, and hie you away from the dust and cinders of travel; the idle tales of idle men and women; down among the lakes set like jewels of burnished silver in groveland. Ride over their dancing, rippled surfaces; explore the dells and bays; pluck the brown-eyed susans that unabashed gaze back upon the dazzling orb of day; swing lazily in hammocks beneath the trees by the water's edge; look out at eventide upon glorious sunsets, when it seemeth that the very heavens are ablaze with fervent heat and that they shall roll up as a scroll; stoop gently down and pick the wild asters that in many and delicate shades of purple line the roadsides. Forget for the while the rushing, surging throngs of humanity in town and city. Rest, meditate, commune with nature and its Maker.

When the great arctic ice-cap melted away, it left scattered through the Detroit lake region, in a general northerly and southerly direction, many glacial accumulations. All through the country south of Detroit are found these morainic hills, and embosomed among them are lakes, lakelets, and ponds. A most diversified topography is the result. Rugged hills from 50 to 350 feet high, roughly bearded with trees; little park-spots verdant and inviting; long, undulating slopes dappled with yellow grain-fields and green pastures; wild, sleepy hollows with tangled underbrush and woodbines; and amid it all, here, there, everywhere, flashing into the sunlight from every knoll or eminence, and dotting the landscape in every direction, lie the large, silver lakes and the cool, sleeping ponds. To the east, the Leaf Hills, tumultuous, rugged, clothed with hardwood timber, and decidedly mountainous in character for this prairie country; to the west, hills indeed still, but smoother, more denuded of timber, the site of fertile fields and farm-houses, with here and there a church-spire pointing its long, tapering finger heavenward. At dewy

morn or dusky eve, afloat on the placid surface of one of the jeweled lakes among these fresh, clean hills is pleasure, health, rest.

Detroit Lake, itself a lovely body of water, surrounded by rugged hills or low, wooded shores, is but one of a chain of lakes that stretches southward midst verdant mead and bossy isle. Here are Muskrat, Sallie, Melissa, Buck, Little Pelican, Pelican, Fish, Lizzie, Crystal, and Lida lakes. In size these lakes vary from one-fourth mile long by the same distance in width, for the two smallest, to seven miles long by two miles or more wide for Lake Lida, the largest.

The Pelican River, a small and most picturesque little stream, is a bond of union down to and including Lake Lizzie. Lizzie and Crystal lakes are connected by another channel, and Lake Lida, the largest and finest of them all, is connected with Lake Lizzie by still another. It lies so close to Crystal, however, that a small portage enables the tourist to soon transfer his canoe or rowboat from one to the other.

As the writer slowly floated along the northern shore of Lake Lida, in the cool of the evening of a summer's day in 1893, there was brought vividly to mind the effect produced upon reading Fenimore Cooper's description of Otsego Lake in "The Deerslayer": "The lake seems made to let us get an insight into the noble forests; and land and water alike stand in the beauty of God's providence!"

The Detroit Lakes & Pelican Valley Navigation Co., of Detroit, have spent much money to afford navigable communication between these lake gems. The Pelican River is not of itself navigable. Dredging has been resorted to to accomplish this result. Thus far, Lakes Detroit, Muskrat, Sallie, Melissa, and Bucks Mills, a point a mile or two below the latter lake, have been brought into communication. Between Lakes Muskrat and Sallie, a regular canal lock was necessary owing to the difference in level between the lakes. The locking of the little steamer Lady of the Lakes through here is always a matter of great interest to the passengers. One of the pleasantest features of this trip is the ride along the Pelican River, with its banks of long grass; the sharp turns of the narrow stream; the wooded heights back from it, and the somewhat rustic, whitewashed bridges under which the steamer passes.

Good accommodations for tourists can be found here. The Hotel Minnesota at Detroit, an imposing, steam-heated and electric-lighted structure, and the Fair Haven House, situated in a beautiful grove on the terraces of the eastern shore of Lake Sallie, furnish good resting-places.

At all these lakes the fishing is of the finest. All varieties of bass, pike, pickerel, perch, whitefish, and some muskallonge are found.

Prairie-chickens, grouse, ducks, geese, etc., are found in season.

THE RED RIVER VALLEY.



THE WORLD'S GREATEST GRAN-
ARY—ITS CITIES AND TOWNS.

READER, did it ever occur to you that there was beauty in a plowed field? Probably not. It may be that where and as you have seen plowed fields there was none. Had you been with me one summer evening in 1893, as the train whirled westward from Detroit to Fargo, you would have said such beauty existed.

Some twenty or thirty miles beyond Detroit, the character of the country begins to change. The beautiful, rolling hills, spotted with lakes, begin to give place to a more level region. The valley of the Red River of the North lies just beyond, and we are rapidly nearing it.

As we rush along some delicious bits of scenery are unfolded. Now it is a knoll close at hand, the apex, a field of waving, green grasses, the base a strong, regular band of black, nearly jet-black—a plowed field. Then comes a little lake beside the track, its borders of sedge, above which the brown cat-tails stand erect. Rolling back from it is a gentle slope, part of it a long, black ribbon of plowed land, following the wavy irregularities of the hills, and capped by undulating fields of green grass and golden grain. Again, we shoot out into a little opening where the slopes fall back and recede far away from our iron pathway. At the crown of the hill is a bunch of woodland, near which are the house, and stable, and corral of the farmer. The slopes are cut into almost regular squares of the green, black, and yellow of the grain, meadow, and plowed lands. Down in the shallow depression at the foot of the slope is a little oasis of living green, where the drainage settles and thus keeps it the greenest, freshest spot of all, while the gradations of color reaching down to it serve to enhance the beauty of the whole. In all this the black of the natural soil itself is not the least attractive element of beauty.

And now the hills are gone—the level plain comes in, at first a little

broken, then a wide, illimitable expanse, as at last the knolls and hillocks of the Lake Park region fade into indistinctness—into the past.

The Red River of the North has two branches, the Bois des Sioux, and the Otter Tail. The latter stream is also called the Red River by many, being the main branch. It rises in some of the lakes in the Lake Park region, west from Lake Itasca, the source of the Mississippi, flows south-southwestwardly, and finally whirls to the north.

The river, including its northern branch, is not unlike a shepherd's crook or a common fish-hook. Over three hundred miles long by thirty to sixty miles wide, the valley contains between 15,000 and 20,000 square miles of the finest wheat-lands in the world.

This is the region of the so-called "bonanza farms," where 10,000, 15,000, 25,000 acres or more of land, are farmed by one individual or under one management. During the summer season these farms present a scene of intensest industrial activity. The celebrated Dalrymple farm near Casselton, is one of the most noted of these bonanza farms. As is naturally to be expected, such a valley as this must needs have towns and cities of some size and importance.

The Red River Valley has many such. At its most southern part is Fergus Falls, a lusty young city, combining the beauties of the Lake Park country for location, with the added advantages of the agricultural value of the Red River Valley. It has a fine water-power, numerous manufactories, and is the seat of one of Minnesota's hospitals for the insane.

Breckenridge and Wahpeton, at the junction of the two branches of the Red River, are growing places. These points are on the Fergus Falls and Black Hills division of the Northern Pacific Railroad.

On the Manitoba line, Crookston, Grand Forks, and Winnipeg in Manitoba are important cities. Crookston is the county seat of Polk County, and is one of the larger towns of Minnesota.

Grand Forks is located on the west bank of the Red River, at the junction of Red Lake River. It is one of the two largest communities in the Red River Valley outside of Manitoba. It does a large grain business, has fine brick blocks, and is the location of the University of North Dakota.

Winnipeg, the commercial metropolis of this part of the Northwest, is the seat of government of Manitoba. It has a large population and is an interesting and important city.

On the main line of road, Moorhead and Fargo, the one in Minnesota, the other in North Dakota—the Red River of the North itself being the State dividing-line—are well-known and important cities. Each is a county seat. Moorhead has the Minnesota State Normal School, and heavy shipments of Red River Valley products are made from here.

Fargo is a railroad division terminus and the junction-point of two

branch roads with the main line. Large shops and round-houses are located here. This young city has but recently passed through a baptism of fire that swept it almost from center to circumference. Its old, and in many cases wooden buildings, have been replaced by sensible structures of brick and stone that are ornaments to the place.

Through the kindness of the late Rev. Dr. Neill of St. Paul—Minnesota's honored historian—I have had the privilege of examining the copy of the manuscript of a journey made by Mr. Alexander Henry of the Northwest Fur Company, in the year 1806, from the Red River to the Missouri. It is a plain, matter-of-fact narrative of a journey as made in those days. Here is an excerpt:

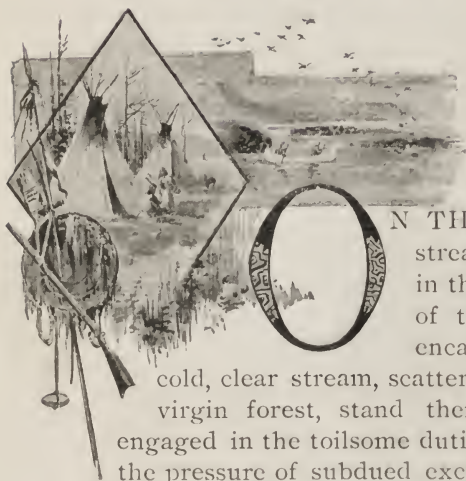
Monday, July 7. . . . We were all well mounted on good horses, and (had) an extra one for the purpose of carrying my baggage. . . . We were much plagued with the mosquitoes that surrounded us in clouds. I had the precaution, previous to leaving home, to get made a kind of mask out of thin dressed caribou-skin to cover the head and face. This I found very convenient, excepting it caused too great a heat to the face. However, I found myself much more at my ease than my companions, who could scarcely defend themselves from those troublesome insects. We found the traveling very tedious, occasioned by the heavy rains which fell in those parts, which had so moistened the ground as to render it ugly and laborious walking for our horses. . . . In many places we found several feet of water. . . . Our horses often sank up to their knees in mud, and at times had water up to their bellies for some distance. The rivulets we swam over on horseback, having the precaution to carry on our heads such articles of our baggage as we wished to preserve from getting wet.

The following shows the manner in which some of their nights were passed:

Our course this day . . . to this place was about north; the distance about ten leagues. We experienced a very disagreeable and uncomfortable night; the weather was hot and sultry, with thunder and lightning and rain, and the mosquitoes intolerable, to keep off which the Indian women stopped close the upper parts, or openings, of the cabins, and made a great smoke inside, but to no purpose; it only made matters still worse by incommoding us with the bitter smoke. If we attempted to cover up our heads we were instantly suffocated with heat; if we remained uncovered we were as soon choked by the smoke and mosquitoes. I therefore thought best to get out of doors, where I was every moment in danger of being trampled to death by the horses, which surrounded the cabins to partake of the smoke. At last, to our great joy, daylight appeared, when we instantly collected our horses, and, although the rain still continued at intervals, we saddled, mounted, and proceeded on our journey.

What would Henry say now, could he see the changes wrought in this land through which it was then such a hardship to travel?

YELLOWSTONE PARK.



JOHN COLTER—ITS FIRST
EXPLORER.

IN THE headwaters of one of the main streams which form the Missouri River, in the heart and under the very shadows of the monster Rockies, is an Indian encampment. Along the banks of the cold, clear stream, scattered among the leafy arcades of the virgin forest, stand their tepees of skins. Moving about engaged in the toilsome duties which fall to their lot, but under the pressure of subdued excitement, go the squaws in that wabbling and rolling movement characteristic of Indian women. Taciturn, moody, silent, the men, some of them, stalk about or squat upon the ground, while the more prominent and older ones counsel together over a matter of importance. The ill-looking curs which infest every Indian village no matter how poverty-stricken it may be, are here also. And there too, on the ground over against a tree, is another object, not perhaps as uncommon a sight amid such surroundings as it might be, and yet not so common but that it is always a cause for excitement among the women and powwowing among the men. Naked, bound hand and foot, secure beyond escape, lies a white man, captive. Not another soul of his own color within hundreds of miles; his only companion dead, killed by those around him who are even now deliberating as to his own fate, death hovers near him, and a few short hours will end his own existence.

An Indian of standing in the tribe approaches. In his guttural tongue he asks him if he can run fast. Understanding too well what this portends, a ray of hope flashes through his brain, but does not show forth on his countenance, narrowly watched by the savage. Feeling that the occasion justifies it, he replies in the negative, although he knows that he is noted among his kind for his fleetness and endurance. With a grunt of approval, the red man departs and conveys the reply to his fellows. Soon

YELLOWSTONE LAKE AND PAINT-POTS.



IN YELLOWSTONE PARK.

NORRIS GEYSER BASIN.



NORRIS GEYSER BASIN, YELLOWSTONE PARK.

the camp becomes more active, and the signs betoken unusual preparations. When all is ready, the captive is again approached, his thongs cut, and he stands upon his feet. Stamping about to restore the circulation to his stiffened limbs, he is ready for the next move. It soon comes.

Leading him into the plain several hundred yards from the body of Indians, he is given to understand that he may save himself if he can. At a signal the tribe, with whoops and yells, rush upon him. Never sprang hound from the leash or buck before the hounds, in greater leaps than did this lone captive, as he plunged forward from his pursuers in a mad race for life. Look at him! With what tremendous strides he clears the ground! Life is at stake, and he presses onward in the supreme effort of his life. Now come to his aid all the years of hardship, all the toilsome marches, the climbing of mountains, the fording of rivers, the perils and fatigues of years gone by. With sinews and muscles toughened by long service, he flies over the ground, his naked feet cruelly torn by the prickly pear. One, two, four of the six miles of plain are covered, and still he pushes ahead unhurt. A glance behind shows that but few of his pursuers have kept pace with him. The fearful effort, though, is beginning to tell. Another mile is run, and the blood gushes from mouth and nostrils, and it seems as if he can go no farther. Another look backward and he sees only one pursuer, but that one so near, that he is preparing to throw his spear at the now winded enemy before him. Suddenly stopping and turning, he throws wide open his arms. The savage, confounded and unnerved by this action, hurls the spear without effect. Another instant and he is himself pinned to earth with his own weapon by the hand of his would-be victim, and the latter, once more with redoubled hope and exertion, is in full surge for the river a mile away. Reaching it, he descries an island, against which the floods have swept large quantities of driftwood and logs. These are now a labyrinthine mass, a tangled barrier. Plunging into the stream, he dives and comes up in and under them. Arrived at the spot, his pursuers hunt in vain for him. Over and around him they go, backward and forward, and many times it seems to him discovery must come, but at length, tired and baffled, they give up the search and depart. Under cover of night the hunted man swims to shore, and for days and nights, without a vestige of clothing, burned by sun and chilled by nightly frosts and dews, he traverses the wilds until the friendly precincts of a frontier fort shelter him and end his sufferings.

Such is by no means an imaginative story of John Colter, the first white man to know and tell of the wonders of what now constitutes the Yellowstone Park.

Following this experience upon what afterward became the Jefferson River, Colter spent many years in this marvelous region, and brought to

the outposts of civilization the first intelligence of the weird and beautiful land God set down in the midst of the mountains, for the pleasure and delectation of his people.

Colter was a member of the celebrated Lewis and Clark expedition of 1804, and upon the return of this party he ventured into the region above mentioned, where the adventure related befell him.

When the overland party sent out by William B. Astor in 1810, under the charge of Wilson Price Hunt, to found Astoria, Ore., was passing through the country above and near St. Louis, they fell in with Colter, and heard from his own lips a recital of his adventurous life. The evidence goes to show that from him at this time was heard the first report of the Yellowstone country, figuratively spoken of as Colter's Hell.

Of this man's end it is not improbable that no one knows. Like hundreds of others, of whom perhaps Kit Carson was the most conspicuous example, he carried his life in his hand. Shot in open fight or in ambush by Indians; perished in the quicksands of a treacherous stream; fallen from the cliffs and dashed into fragments; murdered in the dead of night or in drunken brawl, or starved to death on the sands of the desert and become a feast for the coyotes—any one of these may have been the manner of his taking off. Only the god of day or the silent stars of the night may have known when this man passed from life unto death.

Such the life and such the death of these pioneers of the plains and mountains. Brave, rough, unselfish, adventurous, they made a pathway into which civilization has since flowed in a perennial stream. Living, many of them were honored and worshiped by their fellows as never was tsar, king, or potentate. Dying, they left no trail, and passed from the theater of their little world, too often "unwept, unhonored, and unsung."

LIVINGSTON TO CINNABAR—CINNABAR TO MAMMOTH HOT SPRINGS —SUGGESTIONS TO TOURISTS—AREA OF PARK—HOTELS AND TRANSPORTATION FACILITIES.

To reach the Yellowstone National Park, the main line of railroad is left at Livingston. From thence the Northern Pacific Railroad has a branch line to Cinnabar, on the northern border of the park. This ride of fifty-one miles is through an interesting valley bounded by mountains. It is an appropriate prelude to what follows in the park itself.

At Cinnabar, the Yellowstone Park stages are taken to Mammoth Hot Springs, seven miles distant, and the first of the natural wonders the tourist has come to see. Speaking as accurately as is possible, the Yellowstone Park is about sixty-two miles long and fifty-four miles wide, its

area being about 3,350 square miles. It is an irregular, volcanic plateau, of an average elevation above the sea of about 8,000 feet.

There are in the park — known to be — 100 geysers, over 3,600 springs and pools, besides mud-springs, or paint-pots, as they are indiscriminately termed, and lakes, cañons, small parks, rivers, etc., *ad infinitum*.

To here

SUGGESTIONS TO TOURISTS.

There are always people to find fault and complain. Some of this is due to natural "grumptionsness," the most of it, probably, to sheer thoughtlessness. The Yellowstone Park has its share of these, to whom a suggestion may not come amiss.

This park is over one thousand miles from St. Paul or Portland.

The tourist season lasts but four months, June 1st to October 1st.

There are invested here in hotels, half a million dollars; in horses, stage-coaches, etc., another hundred thousand. The interest on this investment runs through the entire year, the income through four months.

The help employed at the hotels, etc., is gathered at remote cities and transported thither at heavy expense. The same may be said as to all supplies, with the additional statement that a still larger expenditure, proportionately, is incurred necessarily, in the slow transportation by wagon through the park, from seven to one hundred miles.

The same state of affairs exists, practically, regarding the employés and supplies of the stage company. Those who may feel inclined to consider the cost of the park tour as excessive, or the accommodations or service of the park association or transportation company as lacking in any feature, should first carefully consider the above statement. Unjust conclusions may thus be prevented and matters viewed differently.

The character of the hotels, the table, rooms, etc., are as good as can be expected under these circumstances. The transportation company has good and polite drivers, large, steady, and strong horses, and a modified pattern of Concord stage-coach, the best in the world for easy riding and sight-seeing. It may be remarked that the charges are less than are authorized by the Government, which regulates them.

MAMMOTH HOT SPRINGS.

Interesting as is this spot, it is really, perhaps, the least remarkable of any of the special phenomena found.

Briefly stated, they consist of irregular terraces, varying in extent from five acres to fractions of an acre. They also range in height from a few feet to forty and sixty feet. These terraces are the product of the springs.

New springs are ever opening, old ones closing. The process is very aptly stated by Dr. H. C. White of the University of Georgia as follows: "The rocks underlying this particular point happen to be calcareous, consisting mainly of limestone (carbonate of lime) which is somewhat soluble in percolating earth-water. The hot subterranean water, therefore, dissolves a large amount of mineral matter as it passes through the earth, which it deposits on the surface as it issues into the air." Thus are the walls, the embankments, the terraces built up, little by little.

A careful examination will show that these depositions are most wonderful. The delicate tracery, the lace-like, beaded, finely fretted character of these walls is a revelation.

The peculiar processes going on here result in colored waters startling in their brilliancy. Red, pink, black, canary, green, saffron, blue, chocolate, and intermediate gradations are found in complete harmony.

These colors are of an algaous growth, microscopic in character, and the various colors mean various temperatures. Where the water exceeds 150° Fahrenheit, this growth is white; in cooler waters the growth assumes some one of the colors mentioned.

Two peculiar objects standing like sentinels on the level space below the terraces are the Devil's Thumb and Liberty Cap. They are extinct geyser springs, standing dead and cut off, eroded from their fellows.

Jupiter, Minerva, and Cleopatra springs are the more important, while the Pulpit Terrace will impress itself most forcibly upon many.

Orange Geyser, Cupid's Cave, the Devil's Kitchen, and Bath Lake are other objects of interest.

MOUNT EVERTS.

As one stands on the long veranda of the great hotel at Mammoth Hot Springs, he is regaled with a landscape of great variety and possessing many dissimilar features. Close at hand to the west are the wonderful hot springs in all their dazzling radiance. Farther away, southward, blocking vision in that direction, towers Bunsen Peak, the highest mountain visible. Near by, just across the wide plaza in front of the hotel, are the neat and comfortable quarters of the soldiers who patrol the park. Still beyond them, extending miles away southeastward, is the valley of the Gardiner and the East Gardiner rivers. Aside from the beautiful springs themselves, the most interesting object in many respects, is the long, low, flat, and lava-capped mountain unfortunately called Mount Everts. Plateau Everts would be a more truthful appellation. The name is too often spelled E-v-a-r-t-s, and gives one the idea that it might have been named in honor of William M. Evarts. It is cor-

rectly spelled E-v-e-r-t-s, and commemorates the adventures of another individual. How many are there who know his story and the meaning which attaches to the mountain that bears his name? Let me briefly sketch it. It reads like romancing, of rather a tragic sort, however.

On the morning of August 22, 1870, the first party that ever started to explore what is now the Yellowstone Park, with any degree of thoroughness, left Fort Ellis, Mont. It was known as the Washburn party, after the Surveyor-General of Montana.

Among the members of this expedition were N. P. Langford, now of St. Paul, Hon. S. T. Hauser and Hon. T. C. Everts of Helena. There was also a military escort under Lieutenant Doane. The party proceeded up the Yellowstone River to the Grand Cañon, thence across to Yellowstone Lake, around its eastern edge to the southern end, whence turning west they followed down the Firehole River through the Upper Geyser Basin to the Madison River. Following this river out from the park they returned to Western civilization — all but one of them.

On the nineteenth day out, September 9th, when moving across the country bordering the southern shore of the lake, Mr. Everts became lost. The traveling here was difficult, owing to fallen timber, rugged heights, and no trails, and he was not missed until camp was made at night. Mr. Everts was not seen again for thirty-seven days, when he was found by two mountaineers on the verge of what is now known as Mount Everts, perfectly exhausted and partially deranged through exposure and suffering. On the very first day of his absence his horse, left standing and unfastened, with all the man's arms and camp equipments attached, became frightened and ran away. Everts was near-sighted, had not even a knife for use or defense, and only a field-glass to assist him in escaping. He first managed to reach Heart Lake, the source of Snake River. Here he remained for twelve days, sleeping close by the hot springs to keep from freezing. His food was thistle-roots boiled in the springs. One night he was forced into a tree by a mountain-lion and kept there all night. Finally he bethought himself of the lenses of his field-glasses, and thus was enabled to kindle fires. He wandered all along the western side of the lake and down the Yellowstone to where he was providentially found. He gave the story of his terrible experience in the old *Scribner's Magazine*, since become *The Century*, and a thrilling tale it makes. In a country filled with a network of streams, abundantly supplied with animal life for food, gorged with timber for fuel, the man nearly froze, and starved, and perished from thirst. Twice he was five days without food, once three days without water. It was late in the season, and the storms swept down on him and chilled him to the bone, the snows kept him prisoner in camp, or when on his painful marches blocked his progress. He became weaker

and weaker. For several days at the last a large mountain-lion followed his trail to feast on him when he should at last drop exhausted. When it finally seemed as if hope must be given up, and life also, he was found, and carefully nursed back to health. His escape borders on the miraculous. His name was given to the plateau where he was found. Few there are who now remember its significance.

GOLDEN GATE—SWAN LAKE VALLEY—ELECTRIC PEAK—WILLOW
PARK—OBSIDIAN CLIFF.

It is not alone the greater sights, the unique phenomena for which Yellowstone Park is so noted that are interesting. Much more there is, common to all mountain regions, and beautiful wherever found, to instruct and inspire the tourist. Were this not so, the terraces, geysers, pools, and cañons would lose largely their power to please. The mind would have too much of the prodigious sort to grasp, and would become wearied in the effort.

One of the most enjoyable spots found in the tour of the park is just beyond Golden Gate. From the time of leaving Mammoth Hot Springs Hotel it is climb, climb, climb. First, the dazzling terraces are passed; then, winding around the edge of the slopes, ever upward, past strange rock-formations, the entrance to Golden Gate is reached. Here the road, built along the side of the cliff, is in a cañon. On one side the cliff stretches high above; on the other, Bunsen Peak rears its crest still higher.

The exit from the Gate, itself one of the glories of the park, is into a wide-spreading valley. The effect may be imagined, coming from rocks and cliffs and much dead and ancient matter from the terraces, into the broad, living green of Swan Lake Valley. Before us rise the mountains, distant, lofty—many of the peaks sharp or conical, others flat and less imposing, but all making a fine background for the peaceful scene in the foreground. Up the valley the road winds past groves of trees, whose darker foliage sets off well the lighter green of the vast meadow.

Two miles from the Gate lies Swan Lake itself, its rippled waters flashing in the sun. A pleasing, demure little sheet of water, unimportant from any point of view, except that a body of water, large or small, is always a pleasant addition to a landscape. Away to the north towers Electric Peak, the great sentinel of the park. This, the highest peak of the region, being 11,155 feet above sea-level, is a domineering old mountain, and constitutes the northern boundary of this charming valley.

Riding southward, we find adjoining the valley what is well named Willow Park. Imagine hundreds, perhaps thousands, of acres of large willow bushes, not trees, growing most compactly together in well-

arranged masses, in color the most delicious green, and with the breeze making great, winding furrows through them — furrows which constantly change as the wind “fitfully blows, half conceals, half discloses.” So compact are these masses that one can scarce see where the stream that meanders through them finds its laughing way. As we ride along, higher than the willows themselves, the appearance of the park is that of an immense, fluffy carpet.

As the stage rolls along, we notice at the border of the road, here and there, sign-boards. These indicate the locations of springs of pure, wholesome water. Apollinaris is one of these, and tourists frequently stop the stages at this spring and drink of its waters.

Obsidian Cliff is soon reached. This is a curiosity, and well merits close inspection. It is a cliff of glass — not the article made by man, but that made by God.

Black and jagged, it rises 200 feet above the road which winds at its base and over glass fragments, for about a half a mile. When this road was constructed, it was necessary in order to fracture the glass chunks, to build fires upon them, then, suddenly dashing water over them they were effectually shattered.



NORRIS GEYSER BASIN — GIBBON MEADOWS.

Norris Geyser Basin is reached for lunch, the first day's drive from Mammoth Hot Springs.

The phenomena here are over the hill from the lunch-station, and tourists generally walk ahead after lunch and are picked up by the coaches. This place is interesting in its *tout ensemble* rather than in a detailed way. It is somewhat dangerous to go prowling over the “formation,” as in places the crust is very thin and one is liable to break through and be scalded. A number of the best features of this basin are close by the roadside, conspicuous among them being the Black Growler.

Norris Basin is a weird, uncanny place. Vegetation, except trees beyond the immediate confines of the area, there is none. Naturally, there could be none. What with the baking from underground heat, and the vast quantities of steam emitted into the atmosphere, it could not well be otherwise. Thus the general aspect is drear and desolate, gray and dull, and yet, notwithstanding this fact, is a place studied with infinite zest, being the first of the geyser phenomena seen.

Just beyond, as the stage is whirled ahead, there comes before us, at our very feet, a park that may well excite the liveliest feelings of pleasure and delight, and here again the beauty and effect of contrast is seen.

Gibbon Meadows, or, Elk Park, they are called. If the elk in the park

know a good thing, they may well congregate here during the winter months. Bounded by hills and mountains, with a gloriously pure stream winding through it, fine groves of noble trees, and a large area of meadow most beautiful to behold, it is an ideal spot. The feeling breaks upon one that here is the place to camp and enjoy out-of-door life, rusticity, to the fullest degree. The wild, natural parks, as God has given them to us, are, after all, the finest. Nature alone, under proper conditions, unaided by the hand of man, gives us the most romantic, beautiful, and enduring parks. Such a one is the Gibbon Meadows. Wild, untamed, reveling in the beauteous setting God has given, it takes one by storm at the outset, and leaves a picture on the mind never to be effaced.

From the lower end of it we enter the wild and rugged Gibbon Cañon, another of the finer sights. The road twists and winds among somber gorges, along mountain-sides, by the side of a rushing, foaming river, each turn of the road bringing forth a new and inspiring vista.

After a drive of forty-two miles, which seems, so far as times goes, as if it might have been 142 so much has been crowded into the day's experiences, rest and refreshment come at the Fountain Hotel.

· LOWER GEYSER BASIN.

The general appearance here is not unlike that of Norris Basin, except that desolation is more strongly emphasized at the latter. Both are unlike the Upper Basin. The idea that a manufacturing district exists thereabout is borne in upon one at both Norris and the Lower Basin. The general effect of the latter, however, is the more pleasing.

This is also the valley of the Firehole River. This stream is a beautiful one, and the valley, many parts of it, equally lovely. In this basin the branches of the Firehole unite, and in conjunction with the Gibbon River form the Madison, one of the three sources of the Missouri River, and so named by Lewis and Clark after President Madison.

There are nearly seven hundred hot springs within this basin, so that wherever one may go he may expect to find them.

On a small, geyserite ridge hard by and facing the hotel, is Fountain Geyser. This is the first one of real magnitude the tourist meets. It is one of the best in the park, not the largest nor greatest, but quite regular in its eruptions and very beautiful to behold. It propels an enormous volume of water into the air, and from the fountain-like character of its disportment it takes its name. The basin of the Fountain offers one of the best examples from which a careful study of the structure and ornamental character of the geyser deposits may be made.

Close at hand are the Mammoth Paint Pots. These are large mud-



UPPER GEYSER BASIN, YELLOWSTONE PARK.

SEANER LAKE.

SHOSHONE LAKE.



MT. STEVENSON.

springs, but such *mud* as one sees not outside the limits of this park. It is an enormous caldron of vari-colored clay, in a constant state of ebullition. Pearl-gray, mingled with terra-cotta, reds, greens, etc., is the basic color. It is always boiling, with the loud, hollow pop-sound peculiar to thick, mushy boiling substances.

MIDWAY BASIN—EXCELSIOR GEYSER.

Nearly midway between the Lower and Upper Geyser basins, is a collection of hot springs and pools that, except for their great size and very striking appearance would not otherwise attract attention.

The first name given to this spot was Cliff Caldron, a very appropriate name at the time—1871 and thereabout. Close by are Turquoise Spring and Prismatic Lake. This small collection of springs, later became known as Hell's Half Acre. The methods of land measurement at the underground resort are evidently not the same as in this world, for this particular group extends over several acres.

In the autumn of 1881 Cliff Caldron appeared in a new rôle. It then developed into the greatest geyser of them all—the greatest in the world.

During the fall and winter of 1881-82 its eruptions continued. It spouted water from 75 to 250 feet in such quantities that the Firehole River at its base became a raging torrent of scalding water. It expelled rocks, hurling them high in the air, and making it dangerous to remain in close proximity to it. Its throes were so violent that it could be heard miles distant. It is only at intervals of seven or eight years that it gets "on a tear," but it makes up then for all lost time.

The displays of this wonderful geyser are undoubtedly the finest, the most stupendous and awful, of anything of similar character in the world.

When the tourist reaches this place he should by all means leave the coach and, crossing the bridge over the Firehole River, go and view the object of such terrible majesty.

UPPER GEYSER BASIN.

This is where the genus geyser is seen at its best. Here the entire family holds hourly revel and high carnival. The peculiar character of the strata is such, that the finest and most varied geysers known to the park and the world, are grouped within a limited area.

The variety is surprising, both as to external configuration of the cones, and the style of playing. The latter of course is dependent upon the former, as the size and form of a stream thrown from a force-pump or fire-engine is determined by the size and shape of the nozzle of the pipe.

The regularity with which the geysers perform is somewhat irregular.

One may happen to see a number of the finest during the time given to this basin, and again, may miss all but two or three of them.

One there is, though, that never fails. By day and by night, through rain or shine, in winter and summer, during all the months of the year and through all the years of the century, punctually at the appointed hour, every sixty-five minutes, Old Faithful, with a retching and growling ominous to those near by, sends sailing into the air for 150 feet, a vast accumulation of hot water and steam, that oftentimes assumes fairy forms of vaporous imagery.

The Bee Hive is another of the finer geysers, and the Castle still another, that play with reasonable certainty, within certain limits.

Many of the smaller geysers "bob up serenely" at intervals of a few minutes or hours.

One can trudge all over the Upper Basin with scarcely any danger of accident. Signs will show to the sightseer what each spring and pool, and grotto or cone are. When quiescent many of the highest spouters are but crystal pools; others have highly wrought and fanciful cones built up from the deposits of the waters which they eject.

Between the Middle and Upper basins the road winds among springs and pools of great beauty. Biscuit Basin is well worth an examination.

UPPER GEYSER BASIN TO YELLOWSTONE LAKE—KEPPLER'S CASCADES—FORESTS—SHOSHONE LAKE.

The tour of Yellowstone Park means a stage-ride of about 150 miles. This distance is divided into convenient shorter distances, which enable tourists to have more or less time each day to inspect things, and not become fatigued by long rides. Of the many days' rides thus arranged — and they are all full of interest, fine scenery, and enjoyment — the finest is that from the Fountain Hotel to the outlet of Yellowstone Lake. More particularly, it is that from the Upper Geyser Basin to the Lake Hotel.

Leaving the Upper Basin, the road crosses the Firehole River, and, gradually ascending, follows along the right bank. Keppler's Cascades are reached, and the stages stop to allow passengers to walk out to the brink of the cliff and gaze upon the cascades and foamy river in its little black cañon. Then, still winding through the valley of the Firehole, we ride through leafy forest and open glade and enter the narrow and tortuous cañon of Spring Creek. The scenery here is decidedly unconventional and wild. We soon reach the summit of the Continental Divide. Now the outlook is much expanded, and it becomes more majestic and dignified. The mountains overhang the roadway on one side and drop far below on the other. Heavy, shaggy forests cover the slopes and peaks, while tiny

island parks, as it were, and cheerful openings are occasionally seen. The road winds about the mountain-flanks, now climbing up, now descending; the whole aspect of nature grows more grand, more austere; the air grows more rarefied, and one becomes more and more exalted in spirit. Occasionally the mountains break away and you obtain a view far out beyond the narrow limits round about. Distant mountains are seen, and the feeling that there are nothing but mountain-walls about you impresses itself strongly upon one, and it is just about true. After several miles of such riding, and when you have begun to imagine that nothing finer can come, the road leads up to a point that, almost before you know it, simply drives from your thoughts all else seen on this ride. It is a wonderful picture, and produces a state of exaltation that to some must seem almost too strong to endure. The mountains which rise high above stretch also far below, and in every direction are at their very best. Proud and regal in their strength and bearing, they are still, from summit to the depths, heavily covered with the primeval forest. It would seem as if they really knew what a view was here unfolded, and to rejoice in the grandeur of the scene. Like a thread, you can trace the turns and line of the road along which the stage has come. But that which adds the softer, more beautiful element to a picture otherwise almost overpowering in its grandeur, and withal stern and unyielding, is seen through a break or portal off to the south. Far away, far below, lies a portion of Shoshone Lake. Like a sleeping babe in its mother's lap nestles this tiny, lakelet babe in the lap of the mountains.

Shining like a plate of silver, or a mirror, in its wonderfully brilliant setting of stern, dark, and canopied mountain-slopes, it is a gem worth all we have come thus far to see. To make a still greater contrast, there runs toward us from the lake a little valley dressed out in bright, grassy green. Thus we have the silvered lake, the bright, warm green of the valley, and above all, surrounding it and hovering high above it, the dark, black forests of the mountain-heights which jut and run in all directions.

No one can view this picture and not be stirred by it. It is a whole sermon, an inspiration, in its effect on mind and soul. Words can not describe the beauty of the spot, for it is really all of the simplest character; but in its rare combination of effective and simple elements it is remarkable. We see but a small portion of Shoshone Lake. The lake entire is of considerable size, and it is one of the sources of Snake River, which, after devious wanderings, flows into the Columbia River.

YELLOWSTONE LAKE.

The traveler hangs few such pictures upon the walls of memory as that of this beautiful mountain sea.

Its place in the evolution of the Yellowstone Park tour is an exceedingly happy one.

Coming from the succession of the geyser basins, with their uncanny phenomena and their parched and dried-up surfaces, this brimming lake, set like a jewel midst loftiest mountains, affords a refreshing contrast.

The lake lies more than a mile above the sea, being 7,741 feet above tide-water. It is a very irregular body of water, with long, sinuous arms, devil-fish-like. It has been likened to a man's hand with the index-finger missing. Its greatest length is twenty miles, and in its widest part it is not quite sixteen miles. There are several points where hot springs are found, the finest being at the lunch-station on the western arm. Here also there are more of the brilliant-hued, popping mud-pots.

The great charm of the lake is in its mountain surroundings.

In going southward through the park the mountains grow higher and grander. The lake is ensconced among some of the loftiest of them, and there is also much variety. At the extreme south, Flat Mountain and Mount Sheridan are prominent, while on the southeastern side a large number of peaks stand out sharp and clear. A group of three, each nearly 11,000 feet above the sea, bear the names of Doane, Langford, and Stevenson, a trio of contemporary and early explorers in this region.

THE UPPER AND LOWER FALLS—THE GRAND CAÑON.

It seems to me that all great objects of earth, whether created by the divine power of the Omnipotent One or constructed by the hand of man, the being formed in His own image, has each its own teaching, its lesson, its effect upon man's higher nature. We look upon the mighty mountain and apotheosize it as the symbol of strength, majesty, dignity, and grandeur; the babbling brook in the meadow or woodland sings to us its lullaby of joy and content; the great cathedrals of the Old World or the magnificent Capitol of our own loved country at Washington cause us to marvel at the ingenuity and greatness of intellect of man himself and the cunning of his hand; the rushing river speaks of man's restless ambitions and longings, and the heaving, storm-lashed sea finds its counterpart in the tumult of the passions, the tempest of the heart. With all these things we are familiar. Mountains, rivers, valleys, noble edifices, lakes, parks, forests are known to every boy or girl by sight and illustration.

One thing, however, which is not so familiar, which only the geographies of a recent period have described and pictured, is the cañon of our Western country. This physical feature as it exists there seems to be purely *sui generis*, a thing unknown elsewhere. This other and higher effect experienced in looking upon a mountain, a lake, or a monument,

GRAND CANYON, YELLOWSTONE PARK.



UPPER FALLS.



GRAND CANON YELLOWSTONE PARK.

GROUP OF FLATHEAD INDIANS.



FLATHEAD INDIANS. THE OLD CHURCH ALTAR.

which is something more than the mere pleasure of gazing upon it, is peculiarly emphasized in the sight of a cañon, especially if it be one of the finer sort. As it is in itself a combination, a consensus as it were, of many other and diverse physical features, so is its effect, both in the esthetic and purely physical sense, more powerful and amplified.

The traveler or tourist who has never peered into the depths of one of these chasms, and who for the first time walks out to the brink of the Grand Cañon of the Yellowstone and looks forth upon the wonderful scene unfolded to view, will appreciate this fact. With a feeling of awe and reverence indescribable but all-possessing, he gazes in mute bewilderment, almost helpless, spellbound by the silent eloquence and grandeur of one of the sublimest natural pictures that the Almighty ever allowed man's eyes to rest upon. You ask me to picture it?

Did the world ever know an artist that could reproduce the rainbow or depict in language the beauties of the sunset? The scene were worthy a glorified Milton, or the brush and chisel of an Angelo returned from heaven to earth. But, alas! we have no such Milton, no such Angelo.

As one leaves the Cañon Hotel he has a choice of two courses to see the cañon—one to descend the hill immediately to the south, take the trail that winds down the steep hillside above the cañon and greater falls, amid the cool foliage that covers the slope, and go out upon the platform that overhangs the cañon and falls; the other, to follow the road or trail that leads away from the hotel parallel to the cañon, and which some distance away comes out to the edge of it.

The Yellowstone River after it leaves beautiful Hayden Valley flows north. For some distance it has cut its way through the black basalt that once overflowed the region. An obstacle of this nature causes it to swerve to the east, and at the same time and place produces the Upper Falls. The appearance of the river at this point is exceedingly picturesque. The shores are composed of the old lava, against which the rapid current washes in vain. Large chunks of the basalt lie scattered in the bed of the stream, tumbled in from the overhanging mass on the shore or part of the ledge that here crosses the river, and the balance of which has succumbed to the action of the water, leaving these black cubes and fragments as mementos of an unending struggle, survivals of the fittest. Over this ledge the river throws itself in a beautiful fall of over one hundred feet. It goes over, not in a stately, dignified way, but in a jolly, rollicking mood, as if perfectly uncontrolled in its eagerness and joy at being able to pitch headlong over the precipice. Every drop of water seems to feel as if the effort depended upon it. The lovely green of the river is broken into a mass of purest, whitest foam, and with a rush and a roar it is hurled over and down the declivity. Springing from it go millions of

tiny globes of crystal spray, leaping into the air at all angles. At the bottom a sheet of mist moves uneasily about as the cold, fickle wind in the abyss wills it. It is a beautiful sight, and one can watch the playful cataract for hours and see new beauties at each turn.

Leaving the gloomy glen in which it finds itself after its period of effervescence, the river again resumes its northern course for half a mile. Then another ledge of basalt is reached. The waters are choked in, once more deflected eastward, and then, gathering themselves together as a courser, leap far out and over the brink, down, down over three hundred feet into the great cañon below. Between the two falls the river rushes "like Iser rolling rapidly." As one stands at the falls and looks down the cañon, he is nearly in the center of a wonderful picture. Above him hang the walls for hundreds of feet, rather somber in effect. Below him they drop hundreds of feet to the bottom of the cañon.

Looking down the gorge the sight is one well calculated to intoxicate in a spiritual sense. The walls rapidly increase in altitude, and becoming more flaring, lose the sober character given them at the falls by the narrowness of the cañon and the presence of the basalt and foliage. As they rise toward heaven, throwing themselves wider apart that the warm sunlight may shine upon and illuminate them, and devoid of foliage, the scene is one of terrestrial glory. Did mortal eyes ever before look upon such gorgeous color? Did human vision ever before gaze upon such sculptural effects? Do you wonder that when Moran painted his \$10,000 picture of the cañon, that hangs in the Capitol at Washington, that he dared not put upon his canvas with fidelity to nature the colors he found there, because he said no one would believe it was the truth?

And then the falls. Look at them! Study them! With what majestic sweep they go over the brink! They are the very incarnation of power, and withal there is no fussing, fuming, or fretting about it. As if conscious of their terrible power, the agitated but scarce noisy river takes the plunge, and in a tremendous volume, lets go its hold on the rock and goes sailing down, down, and yet still farther down into the dark chasm below. The impact as it strikes the bottom is fearful. It seems as if it were beyond the ability of mathematics to measure it.

You wonder, as you gaze in fascination, how deep the bowl where this catapultic mass strikes it. And now listen! That loud, steady roar as it comes wafted up to you is music. Deep, strong, sonorous, never changing, never ceasing, never did ear of mortal hear finer diapason.

And see the cañon-walls! They are a sheer precipice. There are no slopes, no terraces, no buttresses. Through the long years that know no number, the vast cycles of time in which this splendid cataract—

. . . Sounding and bounding and rounding,
 And grumbling and rumbling and tumbling,
 And clattering and battering and shattering,
 And thumping and plumping and bumping and jumping,
 And dashing and flashing and splashing and clashing,
 And so, never ending, but always descending,

has in the solitude of its mountain recess been playing its one monotonous anthem, it has completely battered away the rocky walls, until not a foothold is left for the daring adventurer that would fain climb down the dizzy sides and be immersed in the misty font of nature's glorious temple.

And now we stand upon the brink of this stupendous gorge. It matters little where. Whether it be upon Lookout Point, near the falls, or farther down the cliff at Inspiration Point, the same splendors are flashed upon us. Color harmony? A term much in vogue nowadays, but did artist ever conceive or dream of such as this?

Now as the cañon is opened to view you obtain an idea, you comprehend as you could not at the falls the vastness of it, the variety and richness of color, the boldness and audacity of cliff and wall.

That is right! Bare your head, humble yourself; it is fitting that you should; you are in the presence of the King of kings, the Lord of lords.

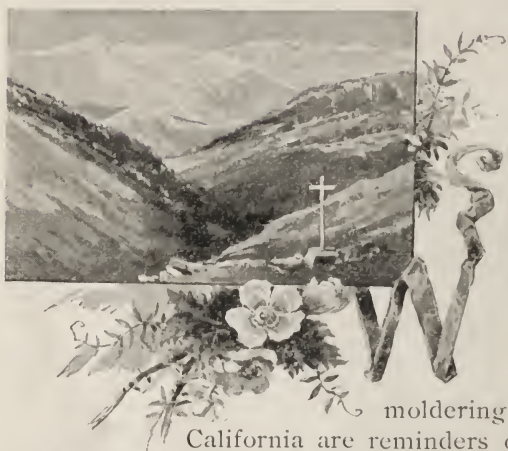
What a wave of feeling rushes over you as you look! What strange sensations you feel! As you drop your eyes into the vast abyss at your feet, an almost uncontrollable impulse comes over you to cast yourself into it. Looking out upon the mighty space comprised between the widely spreading, lavishly decorated walls, you long for the wings of yonder eagle, to spread yourself in graceful flight between. Glancing at the falls, you wonder what the feeling would be to come floating down the stream in a birchen canoe and go sailing out over the combing waters into the cañon below. Whence came all this—how many ages, centuries was it in the forming? What occultism of nature mixed the pigments, manipulated the brush, directed the chisel that has so deftly and boldly sculptured the cliffs and so ornately embellished them?

The Grand Cañon is the grandest of the grand things in the Yellowstone Park. It is a shrine at which one can worship forever. Upon its brink and in its depths—for it is easily climbed and well worthy the climbing—man can wander and wonder and never grow tired. And when done with it—be the time little or long—and compelled to return to the living things, the bread and butter of life, few there be who may not go feeling within them a greater hope of an immortality, expressing itself in those words of faith of poor old Job, the afflicted, which the divine Handel has immortalized, "I know that my Redeemer liveth,"

To here

JESUIT INDIAN MISSIONS OF THE NORTHWEST.

OBSERVATIONS ON SAME.



In the cross of Christ I glory,
 Towering o'er the wrecks of time;
 All the light of sacred story
 Gathers round its head sublime.

BOWRING.

HERE among the Indian tribes
 of the West do we not come
 across the Catholic missionary?
 Either as a past or a present
 force, in localities widely separated,
 he either is, or his former
 presence is manifest.

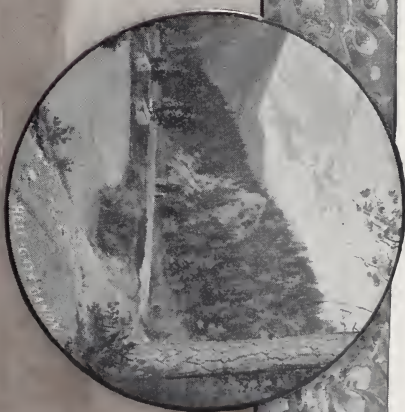
The now silent bells and the
 moldering cloisters of the old missions in
 California are reminders of his former power over vast
 thousands. The squatty adobe churches, among the sun-scorched mesas
 or on the banks of shallow and sluggish streams in New Mexico, tell of
 his ancient authority, and also of his present usefulness in the romantic
 Pueblo land.

In the balmy valleys or among the rolling foothills of Washington,
 Idaho, and Montana, dominated by overpowering mountains, from whose
 heaven-pointed peaks the snows of winter are never gone, the rude crosses
 and archaic churches bespeak the presence of these messengers of Christ.
 If history be traced backward, the monuments of their aggression are
 seen scattered from the land of the Dakotas, the shores of Superior, and
 the plains of Abraham to the pampas of Texas and the Floridian ever-
 glades. No mountains were too high, no forests too dark, no streams too
 deep, no deserts too hot to oppose their progress.

Robed each in the garb of his chosen brotherhood, with the crucifix
 pendent from his breast, they toiled on their weary way, "o'er moor and
 fen, o'er crag and torrent," far from the haunts of men, to live, aye! to
 die among wild beasts, wild scenes, and wild men.



BUTTE CITY.



EAST FROM MOUNTAIN TUNNEL.



BUTTE CITY, MONTANA.

FLATHEAD INDIAN AGENCY.



MONTANA INDIAN AGENCY.



JOCKO VALLEY MONTANA.

FLATHEAD INDIAN AGENCY, JOCKO VALLEY, MONTANA.

In many of the earliest expeditions for conquest the priest was as important a part of the procession as was the soldier. Later, the soldier dropped out, and the priest went forth not only as the ambassador of the church, but as explorer, physician, and teacher as well.

In the occupation of the land the members of the Order of St. Francis, or the Franciscans, seem largely to have possessed the Californian, New Mexican, and southern territory, while the good fathers of the Society of Jesus, or the Jesuits, penetrated the northern and northwestern parts.

ST. MARY'S MISSION—FIRST MISSION IN MONTANA—ITS EARLY HISTORY—FATHERS DE SMET, RAVALLI, AND D'ASTE—PRESENT APPEARANCE OF THE MISSION.

Through some wandering Iroquois from the French Canadian missions, *attachés* of the fur companies, these sons of the mountain and forest first learned of the Christian religion. So impressed were they by the teachings heard that an intense longing grew upon them to see and have among them one or more of the white missionaries from the East.

In the year 1831, after the matter was fully discussed in council, a delegation started for St. Louis to secure a Black Gown, as the Jesuits were termed by the Indians, to return and live among them. This party never reached its destination, but perished by the way. Undeterred by its fate, another embassy took the trail to the settlements, and it is said arrived in safety, but so pressing were the demands upon Bishop Rosati, a nephew of Pope Gregory XIV., and so small the force of priests, that he could only promise to remember them and send a father as soon as he could. After patient waiting and no Black Gown appearing, again in 1837 they sent forward another delegation. This party numbered five, three Selish, one Nez Percé, and an Iroquois. At Fort Laramie, it is stated, these were joined by Gray of Oregon, and at Ash Hollow the entire party were attacked by the Sioux. All the Indians were killed and scalped, and Gray and a white man with him made captives, but afterward released. Notwithstanding the ill-success attending their efforts, once more, in 1839, two young Iroquois, Peter and Ignatius, stood forth and announced their determination to brave the dangerous task and try to reach St. Louis. To their great joy they not only made the journey safely, but succeeded in obtaining a missionary, the renowned Father De Smet.

Peter, full of the joy which comes with success, hastened back to inform the tribe and prepare for the coming of the man of God.

Ignatius and De Smet started in April, 1840, with a west-bound caravan. De Smet was attacked on the plains by the fever, but recovered. In June,

near the Green River, in Wyoming, they met an escort sent forward by the Indians, and on July 14, 1840, arrived at the rendezvous where 1,600 Flatheads and Pend d'Oreilles were assembled.

De Smet's reception was of the nature of a savage ovation. The great chief, an old, patriarchal man, awaited his entrance into their midst with his people gathered about him. Mistaking, as was done in the olden time, the mission of the holy father, he wished to lay down his power and chieftainship into his hands. Like his great master, De Smet hastened to announce that the kingdom of which he was an humble ambassador was not of this world. At the day's ending 2,000 Indians recited a prayer and chanted a hymn. Within a fortnight the Flatheads had learned their prayers. At the end of two months 600 had been baptized.

After a sojourn among them of some months and a thorough study of the situation De Smet returned to St. Louis for assistance. The trail led him through tribes of hostile Indians. His garb protected him and enabled him to reach his destination after much hardship.

In the spring of 1841, with two additional priests and three lay brothers, who were also mechanics, Father De Smet returned to his wards. The Bitter Root Valley was now selected as the site of a permanent mission. At a point now known as Stevensville, on the Bitter Root Valley branch of the Northern Pacific Railroad, a cross was set up, and on Rosary Sunday, 1841, the Mission of St. Mary's was established.

The various labors of the new mission were now carried forward unceasingly. Not only were the masses held, the catechism taught, the gospel preached, and converts baptized, but a chapel and residence inclosed within a palisade were also built, and agricultural pursuits taught.

The mission, as located, was on the east bank of the Bitter Root River, a short distance below Stevensville, and close to where the wagon bridge crossing the river between Stevensville and the railroad station is now placed. The church was of logs and was afterward torn down.

Adjoining this spot is old Fort Owen, an adobe stockade built in those early times by a Major Owen, partly, at least, so it is said, as a speculation. The expectation was that it would be sold to the Government. The ruins of the so-called fort are still there. There are two square, badly cracked, partly tumbled towers, evidently intended to serve as lookout stations, at the two southern corners. These were loopholed. The sides of the structure were low and one story in height, divided into small rooms, some of which are even now occupied. If there ever was anything beyond an embankment on the north side it is now gone.

In the summer of 1842 De Smet again returned to St. Louis, and then sailed for Europe. Here he obtained a reinforcement of fathers and lay brothers, and there also returned with him six sisters of the Congregation

of Our Lady. Near the close of 1843 they sailed from Antwerp for Fort Vancouver on the Pacific Coast, where they arrived in August, 1844.

Among those who accompanied De Smet to this country at this time was Father Ravalli, afterward famous for his good works as priest and physician. In 1846 the first flouring-mill in what is now Montana, was built here by him, the mill-stones being packed in on horses.

Father Ravalli also erected here the first sawmill. For this purpose he welded together four wagon-tires for the crank, while another tire, after much hammering down and filing, answered as a saw.

Anthony Ravalli was what might have been termed a strange incongruity in this region. Born in 1812 at Ferrara, Italy, he devoted long years to scholarly pursuits and studies. He seems to have imbibed an ardent desire from the first to devote his life to these same Indian missions. To this end he studied medicine, mechanical trades, architecture and painting, with the physicians, artisans, and artists of Rome.

When, therefore, in 1843 De Smet sought help in Europe, Ravalli joined him, and left parents and native country never to see them again.

His name is inseparably connected with St. Mary's Mission. Here he began his work, and here he ended it. From 1845 to 1850 he was at St. Mary's. When the mission was abandoned, he spent his years among the other missions in the mountains, and upon the reopening of St. Mary's in 1866 he again returned to it never to leave it more.

Tall and somewhat slender, of bold, pleasing features, capable of bearing great hardships, bright and witty, Ravalli was known and beloved throughout Montana for his unselfish life and noble deeds. Not alone the Indian, but the miner, mountaineer, and frontiersman experienced his skill as a physician. For over fifty years he lived and moved among them, and at his death a fine monument was erected to his memory. His utter helplessness in his last days was pathetic. For over four years he was a prisoner on his couch from paralysis of his lower limbs, and suffered intensely, yet during it all he dispensed spiritual advice and such medical aid as he could. He died in the fall of 1884, at St. Mary's Mission.

For six years the work of the mission was carried forward; then trouble came, caused, as the Jesuits state, by the jealousy of fur-traders and unprincipled white men, who succeeded in shaking the confidence of the Indians in the fathers. In 1850, on account of annoyances and dangers, the mission was closed, and for years remained unoccupied. The Indians relapsed, to a greater or less degree, into their former nomadic habits. During the period of its desuetude other missions in the region to some extent lessened the necessity for its reopening.

In 1866 the mission was reëstablished and the present church built.

Now that the Indians, who formerly numbered about 1,000, are at the Jocko Reservation, the church is opened only at long intervals.

The church proper is about 15 x 54 feet, one-storied, built of logs, and whitewashed. The façade is clapboarded, and has a square tower in the center about 5 x 5 x 25 feet, surmounted by an open, octagonal belfry supplied with a bell, from the peak of which rises a wooden, white cross. The tower has long, narrow, double, green-latticed windows on three sides. Back of the main building is a one-story addition much lower than the church, and back of this is still another addition yet lower in height. At the extreme end is a story-and-a-half building attached to the others. All these various extensions to the edifice itself were used for living-rooms by Father Ravalli, Father D'Aste, and their attendants and help.

The appearance of the entire structure would indicate that it was built at different times. Even the church itself appears to have been, as the two parts of the building are out of alignment.

The mission faces to the east, is surrounded by a row of fine cotton-wood trees watered by an irrigation canal, on two sides. On the north the grounds are inclosed and a number of buildings scattered about.

On the south side of the mission were the entrances to the living-rooms. From these around to the main entrance on the east is a clean, white cobblestone pavement, made undoubtedly by the Indians.

An attendant escorted me through the church after dusk. The light was a dimly religious one, of mingled expiring daylight from the three windows on each side and a flickering candle.

At the rear of the room was the usual altar seen in a Catholic church; at the front was a choir-loft supported by four substantial wooden painted pillars. At one side of the open body-space used by the devout Indian worshipers was a small confessional.

The sitting and dining rooms interested me more than did the church. The former, not large, was plainly furnished. At one side was an old-fashioned secretary, used probably by Father Ravalli, and in appearance as if he had but just left it. In a corner stood a single bed, and three small pictures were on the walls, one of which I recognized as a picture of St. Ignatius Mission in the early days.

In the dining-room, scantily furnished, an object of deep interest was a triangular cupboard, Father Ravalli's medicine-shelves. Opening the door, there stood revealed a large number of vials and bottles, with powders, and mixtures, and tinctures, just as the good priest had left them.

Excepting a slightly musty odor because of lack of ventilation, everything about the place was ancient, sweet, and clean —

But all the bloomy blush of life is fled.

By the lantern's light I sought the old graveyard near by. Earthen mounds and wooden crosses told the story of life's decay. Rising above all, as in life the kindly shepherd did, was Ravalli's marble monument.

Remote from towns he ran his godly race,
Nor e'er had changed, nor wish'd to change, his place;
Far other aims his heart had learn'd to prize,
More skill'd to raise the wretched than to rise.

THE MISSION OF THE SACRED HEART, OR THE CŒUR D'ALÉNE MISSION—CŒUR D'ALÉNE MOUNTAINS—CŒUR D'ALÉNE LAKE—THE OLD MISSION.

Many miles over to the northwest from St. Mary's Mission, beyond the formidable barrier of the Bitter Root Range, lies another of the haughty rock-ribbed mountain systems of this part of the northwest land.

In many places, nature seems almost to have tumbled over herself in her efforts to produce scenic effects of the wild, unconventional sort along the Cœur d'Aléne branch of the Northern Pacific Railroad in the Cœur d'Aléne Mountains.

Nature, however, is capricious, and loves to startle and surprise the spectator. She has not alone brought forth here a mountain region that challenges the wonder and vocabulary of the onlooker by the massiveness of its structure, the daring sweep of its slopes, the gloom of its gulches, the adamant walls topped with ragged crags and bristling pinnacles. Of old she was also of a more amiable mind, and reared mountain monuments of a gentler sort—mountains with softly rounded slopes, graceful forms, of peaceful mien, garbed in dark and cooling forest green, or carpeted with mountain grasses and mountain flowers.

To further captivate the esthetic soul she filled in some of the valleys and depressions, amid these peaceful surroundings, with a lake pleasing to the eye. With its irregular shape and varied outline it fits into the harmonies of the region to an eminent degree. Flowing from the remoter defiles of the mountains comes also a river, sluggish and narrow.

Here then we have the mountains of the Cœur d'Aléne, the lake of the Cœur d'Aléne, the river of the Cœur d'Aléne; and here also were the Indians of the Cœur d'Aléne. Supported by the game which the mountains supplied abundantly, and fish taken from the lake, with an occasional buffalo-hunt, they wandered among gloomy solitudes, or drove their canoes adown the lazy river or across the placid lake. So jealous were they of this their home land and lake, that it was long before the white hunter and trapper were able to penetrate its sacred recesses.

But the time came when, inoculated by the teachings of the tribes of their mountain vicinage, they too became importunate for a Black Robe.

In obedience to this call, and to their own desires to go up and possess the land, the worthy fathers at St. Mary's in 1842 — Bancroft says — established the Cœur d'Aléne, or Mission of the Sacred Heart. Selecting a spot beautiful in its outlook, twenty miles distant from the lake in the valley of the Cœur d'Aléne River, the mission was begun. One account states that the mission was first established on the St. Joseph River, and removed to its present location in 1846. On an eminence overlooking a fine expanse of level valley, with the winding river stretching away to the west and washing the slopes of the elevation upon which it stands, the church of the mission is located. It presents an imposing appearance viewed from a proper distance. It was designed by Father Ravalli.

The edifice is of logs, clapboarded and painted white, or whitewashed, ninety feet long, including the porch, by over forty feet wide. There are on the sides two rows of windows of four each, one row just under the eaves. The porch, twenty-five or thirty feet high, is supported by six round, wooden columns on square bases. The face of the building above the porch is symmetric and ornamental. At each side, springing from the porch, is a square pedestal surmounted by an urn. Above these, and drawn in toward the center, is another urn on each side, and from these springs an elliptic arch whose central point grazes the ridge-line of the roof. Above this point of the arch rises a cross of good proportions.

The church was constructed by priests and Indians, so it is said, with the most meager assortment of tools, and some positively assert without nails, the latter being used later in repairs, however. Other necessary buildings were round about, and the mission prospered. Bancroft says, "Here about two hundred acres were inclosed and under cultivation; mission buildings, a church, a flour-mill run by horse-power, 20 cows, 8 yokes of oxen, 100 pigs, horses, and mules constituted a prosperous settlement." It is maintained that between 1840 and 1846, 6,000 Indians became converted to the Catholic faith. At the time of the abandonment of St. Mary's Mission this, with others, was still maintained.

Life here must have been in many respects rather poetic to the older fathers. Far from the haunts of civilized companions; instructing a dusky race who were as so many children; in the midst of scenery as inspiring as it was varied, where rugged mountains, graceful hills, a silvery river of romantic windings, and a limpid lake set like a glistening jewel in its mountain frame each vied with the other to enthrall the senses — surely life must have partaken of much that seemed unreal, mystical.

As the years came and went with their attendant changes, and the

Indian population gradually decreased, the importance of the mission grew less. It still stands, however, and is in use occasionally.

The tourist who desires to see the old mission can do so by taking the train at either Missoula or Spokane over the Cœur d'Aléne branch of the Northern Pacific Railroad.

ST. IGNATIUS MISSION—FLATHEAD VALLEY—MISSION RANGE—AN IDEAL MISSION.

On the western slope of these mountains
 Dwells in his little village the Black Robe chief of the mission.
 Much he teaches the people, and tells them of Mary and Jesus.
Longfellow's Evangeline.

The first mission of St. Ignatius was established on Clark's Fork of the Columbia, not a great distance from Fort Colville, in 1844, by Father Hoeckin, a Jesuit. After occupying this site for a number of years it was found to be undesirable from a number of causes. It therefore resulted that after St. Mary's Mission was abandoned in 1850, the present location of St. Ignatius was selected, and in 1854 it was opened.

St. Ignatius lies seventy miles north of St. Mary's, and some distance south of its former location. It has always prospered, and never more than at the present time.

St. Ignatius Mission as it now exists . . . was scarcely dreamed of by the fathers who founded it. Small log cabins, little better than the wigwams of the Indians, were the first houses built; but as the needs of the mission were multiplied, these became the nucleus of a larger and more permanent establishment. At first the fathers followed their wards into the forest and lived with them, sharing in all the hardships of savage life. Soon, however, they became convinced that all hope of good results from their work was to be placed in the education of the children.

On this theory schools were begun, and on the principle that "as the twig is bent the tree is inclined," the effort is made to obtain the children when very young and retain the charge and direction of them. As to the probable success of this, Senator Vest of Missouri, who had been among them, and who is himself a Protestant, said:

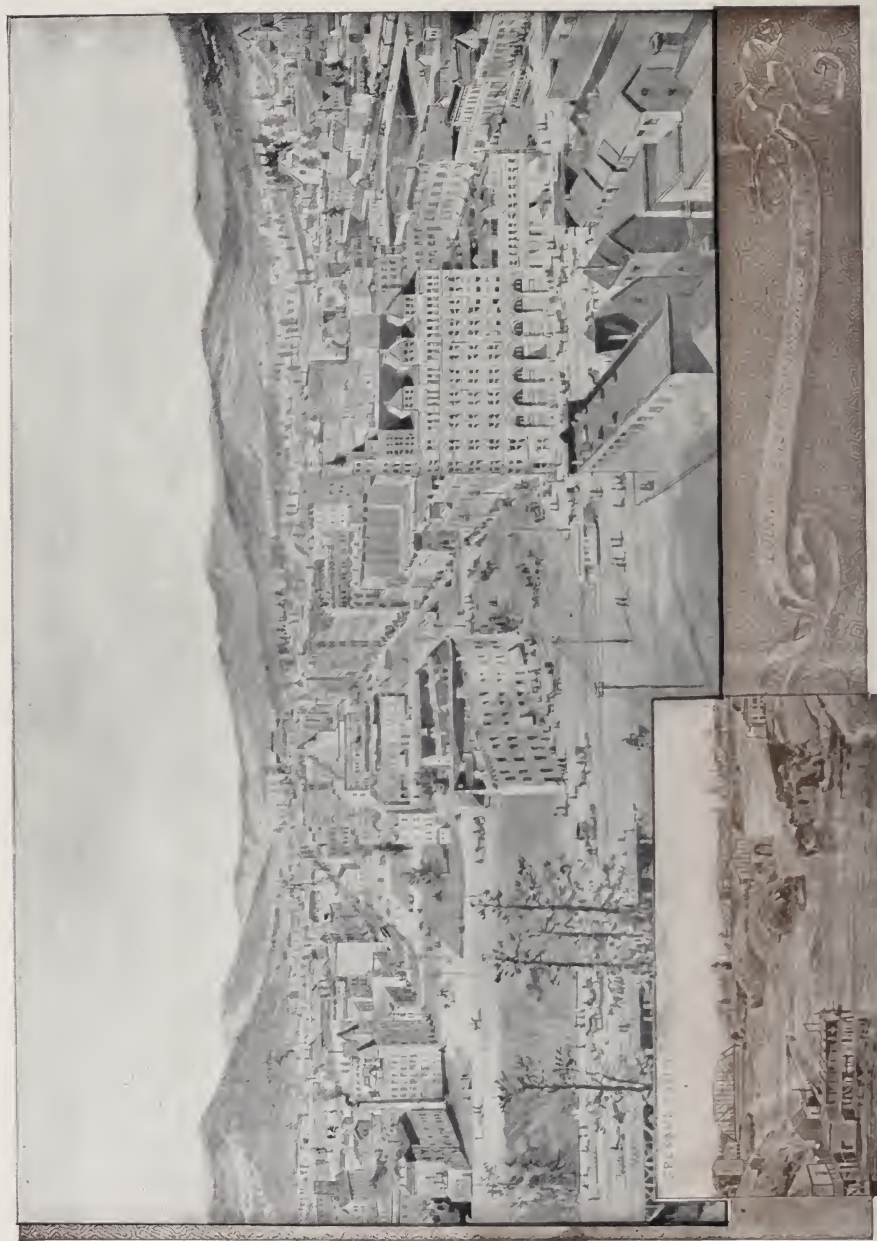
The only ray of light I saw [in Montana] was on the Flathead Reservation at the Jesuit mission-schools. Never in the States was there a better school examination of children . . . than the one which I saw there. The girls were taught needle-work; they were taught to sew and teach; they were taught music; they were taught to keep house. The young men were taught to work upon the farm, to herd cattle, to be blacksmiths, and carpenters, and millwrights. I say now that the system adopted by the Jesuits is the only practical system for the education of the Indians, and the only one which has resulted in anything approaching success.

My first trip to the Mission of St. Ignatius was in the summer of 1892. Leaving Ravalli, the railroad station for the mission, the road led up a long, winding coulé, so that progress was slow. When we reached the divide a picture worth coming miles to see burst upon us. Far away to the north stretches the Flathead Valley, long and wide, bounded by the distant, hazy foothills, which roll back in billowy folds against the impenetrable flanks of the mountains behind them. Off beyond that veil of royal purple, fabricated by other than human hands and machinery, and which from our low elevation we can not pierce, lies the beautiful Flathead Lake. Flowing from it toward where we stand comes the river of the same name. Away down in the valley to the north, the sinuous lines of dark-green mark the tributaries of the river in the valley, fresh from the virgin snows far back in the bosom of the mountains. Directly in front, and nearer at hand, is the climax of the scene. Down in the open, along the well-wooded banks of Mission Creek, lies the old mission. Under the hot, meridional sun it stands out strongly, and with the vast array of the old, homelier log cabins, and the many and large buildings of the newer time, it appears like a thriving settlement. But look now, over and back of the mission, at that magnificent spectacle of upheaved mountain and piercing peaks! In itself it is a scene of grandeur and power approaching the sublime. I have seen elsewhere mountains of all sorts and heights. I have seen them under all lights and conditions. From the retreating foothills I have gazed up at their tremendous heights in silence and awe. From distant divides and valleys I have admired the buttressed flanks which evidenced strength unyielding, and bore aloft beetling crags and carved domes which spoke an architect divine, a sculptor eternal. On the pinnacle of a lofty range I have found myself encircled by jutting crags and bare-rocked peaks, rising still higher, and separated by cañons and chasms of wondrous beauty and tone. Seldom indeed in my many wanderings, however, have I stumbled upon a scene which combined as many of the elements of a perfect picture as did this.

The Mission Mountains rose *en masse* from the plain, a buttressed, majestic group, their wide, black flanks gashed by profound cañons. The lower portion bore a luxuriant forest, the upper peaks and crests were bald and naked. The contrast between the broad, dark slopes of timber and the high, sharp peaks and perpendicular cliffs above, unadorned save where decorated by jewels of immaculate snow, and of a light-tawny tint, was perfect. One cañon was cut far back into the very vitals of the range, and opened out into a colossal recess or amphitheater. From high up in this retreat, leading down into its lower and gloomier depths, was what in the distance appeared to be a long, attenuated line of snow, but which in reality was a cascade and fall a thousand feet in height. The



THE CLARK'S FORK REGION, MONTANA.



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SPOKANE, WASHINGTON.

elevation of this mass was thousands of feet above me, and the attitude was that of imperial nature awaiting the homage justly due her. This splendid spectacle, in combination with the more subdued one of grass-robed valley, wooded stream, and cuddling mission, formed a landscape fit for an artist. Stopping the vehicle, I got out and silently gazed upon the enchanting prospect.

It was inspiring beyond expression, and no view of equal grandeur and interest is so easily open to the traveler as this. Majesty, grace, magnificence, beauty, delicacy, softness, all in one, are surprisingly worked out.

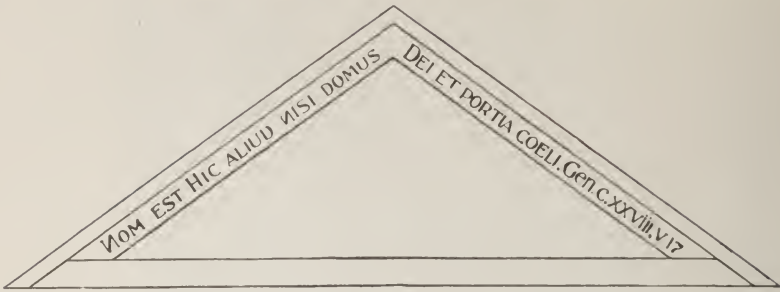
Resuming our way we soon reached the mission. I seemed to be in the midst of a prosperous village. A peculiar appearance it bore, too. "The old and the new" were in odd juxtaposition. Log huts, strongly built and comfortable enough, but pregnant with an ancient flavor, squatted beneath the shadows of large, roomy buildings, modern and graceful in architecture, well painted, and expressive of comfort and prosperity. The one carried me back to 1854, the other showed the onward march of improvement even in this isolated valley.

As I studied the scene I wished that I might be here on St. Ignatius Day, the great *fiesta* of the year.

"It is honored with great splendor every year, a large number of Indians camping about the church before the feast. Their showy blankets add a gorgeous coloring to the picturesque scene presented in the elaborately decorated church during the pontifical mass."

In front of me were the two antiques of the mission. These were a cross planted in the ground, and the old church. The former, standing in the center of the street, was surrounded by a low wooden platform of two steps. It was from twenty-five to thirty feet high, and stood one hundred feet distant and in front of the church. Above the horizontal arm, and facing the church, was a small, rectangular tin plate with the words "JESU NAZARENUS REX JUDAORUM" (Jesus of Nazareth King of the Jews) painted across it. I was informed that this was the original cross, set up here in 1854, but it hardly presented such an ancient appearance.

The church was built in 1862, is rectangular in shape and one-storied, but that one quite high. It was a plain structure, probably of logs covered with clapboards, 100 feet long by 40 feet wide. Large double doors, with an oval-shaped transom, occupied the center of the façade. A square tower, badly proportioned, projected above the roof at the front end. Near the top this was surrounded by a balcony and railing. The tower here changed to an octagonal one, and the whole was surmounted by a graceful cross. There were two windows in the tower, one below and one above the balcony, to break the monotony. There was also a gable window. Just under the projection of the roof at the front elevation, and following the angle of it, were carved these words:



or translated, "This is none other but the house of God, and this is the gate of heaven."

At this time the Indians from all over the reservation gather here and take part in the many and elaborate religious ceremonies observed. Many other of the holy and noted days of the church are observed with fitting services by the Indians.

In the winter of 1893 I paid another visit to the mission. As we gradually mounted the divide a vision far different from that of the summer-time burst upon me. It was now winter twilight.

Far in the distance, as if pendent between heaven and earth, hung like a censer from on high by a cord invisible to mortal eyes, there came slowly into view an irregular, serrated something. Like a cloud, a vision, an intangible vapor, whatever one might picture it, it seemed.

White — immaculately so — pure, dreamy, and ethereal, it was succeeded by another and yet another.

They were the high, cold peaks of the Mission Range. Only the very tips of the highest crags were visible, being sharply cut off by the dark divide near at hand. And they were so white. "Clad in robes of virgin white," God's own ermine, the freshly fallen snow, they were so in keeping with the spiritual, missionary work of soul-saving and doing good to which the fathers and the mission in the beautiful valley over which they rose were devoted, that the vision was peculiarly appropriate.

When I knocked at the door of the office of the mission at my first visit, I was met by Father D'Aste, who received me cordially. Father D'Aste was at St. Ignatius for many years, but is now at the Jocko agency.

Father D'Aste placed me in charge of a young scholastic, Mr. Post, but time did not allow me to see nearly all there was to be seen.

At my second visit I was enabled to see more. Father René, the present superior, and his assistants were urbanity and kindness itself. Mr. Brown at this time was my conductor. I am under great obligations to all these good fathers for the kindly interest they took in my inquiries.

St. Ignatius is manned by four priests, and usually, also, four scholastics

and five lay brothers. The priests do the church work in general, have general supervision of affairs, and visit the Indians on the reservation when deemed advisable. The scholastics have charge of the schools, and look after the boys in their work and daily life.

There are also fourteen Sisters of Providence, who have charge of the girls from the ages of nine to twenty-one years, and until married. As before intimated, these girls receive practical instruction in all things pertaining to the life they will lead after leaving the mission.

The kindergarten, in which all girls under nine years old are placed, is in the care of the nuns of the Ursuline Order.

The building of the sisters is a fine three-story structure, 130 feet in length and 45 feet wide. The first floor is divided into reception-room, dining-room, infirmary, etc.; the second floor contains a school-room, chapel, small dormitories, etc.; while the third floor is one vast dormitory. This building was erected in 1885.

In making a tour of the mission one is impressed with the wisdom and convenience of arrangement found. The buildings, many of them, are heated by steam. The dormitories are well arranged. One feature of them is quite unique. Through the center of each extends a long, tin trough, perhaps eighteen inches deep and two feet wide, neatly painted inside and outside. This is supported on iron tubing, and around the rim of the long basin is more tubing. At convenient distances there project from this rim tubing over the trough, small iron nipples. By turning a valve a stream of water plays from each orifice, and here the Indian scholars make their morning ablutions, one at each jet of water.

Convenient to the sleeping-rooms is a veritable apothecary's shop, where in case of emergency medicines are quickly obtained.

The scholars at St. Ignatius are taught something besides "book-learning." In one room I entered there were seven Domestic sewing-machines in a row, at which Indian girls were seated. In November, 1893, there were fifty-three dresses made by them. Some of them I saw, and they were a credit to the school. At the Flathead Agency a day or two before I had seen a comely young squaw, a graduate of St. Ignatius, cutting and making "a gown," I suppose I should call it.

In one part of the building is a huge range. Here the food is prepared by young girls under suitable direction. At another place is a dairy and milk room. In one room is a monster, old-fashioned bake-oven. They were just on the point of drawing the fire and putting in the bread. At one side were fifty-two loaves of bread, light and ready to be placed in the oven. This was their daily baking.

In one school-room I was shown maps drawn by the girls, of the Flathead Reservation. They were some 22 x 28 inches in size, and the general accuracy and originality displayed was striking.

In another room I heard music, not *Indian* music, either. One young miss sang the solo parts with all the confidence and fearlessness of a prima donna, and the chorus was promptly taken up by the others. Another Indian girl played the accompaniment. It may be interesting to note that these girls carried three parts, soprano, alto, and tenor. The church choir at St. Ignatius is composed of girls.

To show the progress made by the young Indian in the arts of penmanship and composition, there is here shown a fac-simile of the last sheet of a composition by a young, full blood Indian miss, Eugenia Kanague, entitled "Description of the Mission," obtained at my last visit to St. Ignatius:

*whose lives were intertwined with our own and
who in death are still very close to our hearts.*

*Scattered here and there around the Fathers
and Sisters' buildings are also to be seen the huts
of the Indians, a store, a small hotel, a Post-
Office, a saw and a grist-mill.*

*To conclude with my description, I shall
say something of the inhabitants. They consist
chiefly of Flathead Indians. A great many
of them are industrious and are living quite
comfortably and peacefully. However, there are others
that are lazy and never think of providing for them-
selves or their families. I do not know rightly
what the Indians' character is, although I am
an Indian girl myself. Still, I have only
studied my own.*

Eugenia Kanague.



NORTHERN PACIFIC DINING CAR.



NORTHERN PACIFIC SLEEPING CAR.

How many American girls fifteen years of age can surpass the penmanship, or express with such *naïveté* a thought so creditable as that embodied in the last sentence?

The fathers' and boys' main building is also three stories high, 120 feet long and 90 feet in width. This building has all the comforts one could wish, and is heated by steam. The fathers, brothers, and boys are domiciled here, and the whole building is neat and clean, and a very interesting place to visit. The immense dormitories, with their rows of iron cots all in order, savor of military-like regulation. Each dormitory is in charge of a father or brother.

On the first floor is a chapel, finished in natural woods by the carpenter of the mission, assisted by the Indians. It is a very impressive place; and when one looks upon the character of the work done, the matching of the floor and handsome ceiling, the finish of the window-casings and the carving, he is apt to think that there are some possibilities in the Indian if he is given a fair chance to develop them. On this floor also are the office and reception rooms, dining-rooms, and kitchens.

The second floor contains the apartments of the fathers and some of the boys' dormitories. Here there is also a large library, well stocked with books for the fathers, and a fine guest-chamber. The third floor has more dormitories and rooms used by the fathers.

The old school building is three stories high. Near it is the industrial building. Here are a saddlery-shop, tin-shop, shoe-shop, printing-office, and carpenter and blacksmith shops close at hand.

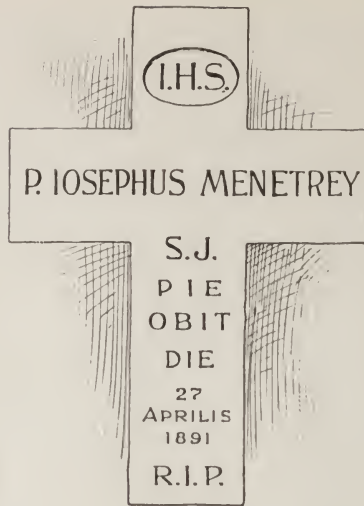
Some fine specimens of work in each of these lines can be seen, done by the Indian lads.

A good grist and saw mill run by water-power belong to the mission.

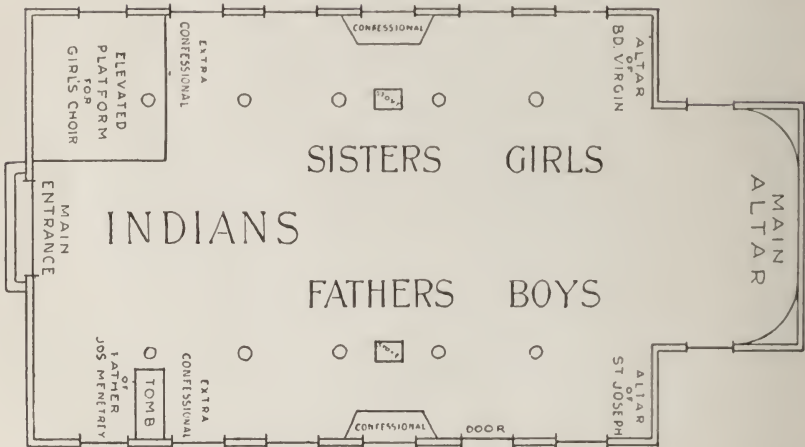
A visit to the old church is of course an agreeable duty. For nearly forty years now it has served well its end, and will soon be abandoned.

Entering the door we find a nave some 90 feet long, 45 feet wide, and 25 feet high. The ceiling is supported by two rows of columns, one on either side. Round, white, symmetric, and stately, they impart character and dignity to the place. At the extreme end is the main altar, in a semicircular recess. It is flanked upon one side by a small altar of the Virgin Mary, on the other by one of Joseph, her husband. The style and degree of refinement shown is so superior to what one expects to find here that the effect is most happy. Just to the right after being fairly within the edifice, is an object worthy of note.

Upon the wall is a cross, the vertical arm perhaps two feet long. Upon the cross is an inscription in Latin. Father Joseph Menetrey, one of the founders of St. Ignatius, died in April, 1891, and lies buried beneath the floor at the point marked by the cross. The inscription is as follows:



There are four confessionals. The plan of the church is here given:



POSITIONS INSIDE OLD CHURCH.—Boys, girls, Indians, etc.—Positions of same during services. The Indians fill the whole lower part of church, the men on the right and the women on the left, up as far as the confessionals. They all sit tailor-fashion.

There is now nearly finished a large brick church, or cathedral, the bricks of which were made here, and the building has been carried forward almost entirely by mission help.

When completed this church will be a very fine one. It has a basement, and the main audience-room is about 100 x 50 feet, with a forty-feet

high ceiling. It will be steam-heated, and when done will have cost about \$50,000. The daily routine begins with the clanging of a gong-bell at 5 o'clock A. M. and closes with one at 10 o'clock P. M., the retiring-hour. At 6 A. M., at the ringing of the great bell, the boys and girls respectively kneel in bed, repeat the Angelus aloud in unison, and then arise. At 6.30 A. M. mass is said. The boys go to their chapel, the girls to theirs, while the Indians of the little settlement gather at the church, where one of the priests says mass. At 7 A. M. breakfast is eaten, and from that time until 9 o'clock is playtime. From 9 to 12 o'clock and from 2 P. M. to 6 P. M. are school hours. Dinner is served at 12 M. and supper at 6.30 P. M. At 8 o'clock P. M. the boys and girls are sent to bed. On Tuesdays and Thursdays there is a half-holiday, but none on Saturday. During the day, in addition to their labors in the school-room, the boys and girls are at their tasks—some of the boys at work in the fields, others in the shops, while the girls are employed in the sewing-room, in the kitchen, or in the bakery, etc. On Sunday—which is a holiday—and on feast and holy days the order of procedure is of course varied.

The fathers and sisters have under their direction now about 300 boys and girls, ranging from the full-blooded Indian, to those whose appearance is rather that of a Scandinavian, so little Indian blood is there in their veins. By obtaining the children when they are little wee tots, the difficulty of managing and teaching them is reduced to a minimum.

The weak point in the whole scheme here and at other Indian schools, and for which the Government is equally responsible, is the fact that after leaving school and the mission the pupils, many of them, drift into their old habits and life. In many cases they do not, and this tendency to practically apply what they have learned is happily increasing. The fathers, sisters, and the agency officials coöperate in promoting marriages among the pupils at the proper ages, and endeavor to assist them in properly starting in outside life by furnishing to them farming implements, houses, cattle, etc., sufficient to encourage and help them, which it does, but their means for this are limited.

The Government annually appropriates money for the partial support of the schools, and its labors and results have been lauded in strong terms by Congressional committees and Indian commissions.

It deserves it all. St. Ignatius is doing a good work. *Esto perpetua.*

THE YAKIMA COUNTRY.



AN IDEAL FARMING REGION —
THE INDEPENDENT FARMER —
ADVANTAGES OF IRRIGATION.

SCORE of years since, the writer was speeding westward on the only transcontinental railroad then built. Among his fellow-passengers were a colonel in the regular army and a mining engineer from New York City.

One morning the engineer and myself stood on a car platform to obtain a whiff of fresh air. The

train was passing through a sage-brush plain.

Looking out upon the dreary prospect, the former, taking his cigar from his mouth, remarked upon the worthlessness of the thousands of square miles of land about us. "Nothing but a naked sage-brush patch; no good on earth; won't even raise beans," said he.

"Hold on, my friend," I replied; "that is where you are away off. You don't know what you are talking about. There isn't better land anywhere than that sage-brush desert if you can only get water upon it."

He would scarcely credit this statement. Soon the colonel joined us. Addressing him the engineer said, "My friend here has just told me so and so" — repeating the substance of my remark. "It is hard to believe this; it is so contrary to what I have always understood about such land."

Straightening himself, with a sweep of his arm, and glancing over the apparent Sahara, "No better land anywhere; raise anything out there with irrigation. Big sage-brush, means splendid land and splendid crops." The engineer was convinced.

Irrigation seems to have been almost coincident with civilization. Long, long before the star in the east guided the wise men to the manger

IRRIGATION CANALS

OF THE YAKIMA VALLEY,

WASHINGTON,
Constructed Canals
Proposed "



YAKIMA R. ABOVE PROSSER.



NEW HOTEL AT PROSSER.



THE YAKIMA VALLEY, WASHINGTON.

in Bethlehem in which lay cradled the Christ-child, Egypt, Rome, China, India, and other countries were practicing irrigation.

Why, in our own country, our wide-awake engineers are partially using irrigation-works in Arizona constructed by an ancient civilization. In some cases these old prehistoric engineers so built their canals, as to irrigate lands that our modern engineer has not yet been able to get anywhere near.

And yet we have thought that irrigation was a new thing; a problem to be solved; an evolution, if you please, of our own time and day, and peculiar to certain parts of our territory, and agriculture.

Fie upon all such notions! Let us undeceive ourselves, and especially our Eastern population, and learn the truth.

The Ibrahimiyah irrigation canal of Egypt is 170 miles long, and at its head is 200 feet wide on the bottom and 33 feet deep. The Suhugiyah canal is 328 feet wide at the bottom and 8 feet deep. Great rivers these, that put our most pretentious irrigation-works far to the rear.

In modern times the first attempts at artificial irrigation in our country were made by the Mormon people. It was largely, with them, an alternative of irrigate or starve. Leaving the prairies of Illinois and Missouri, for reasons well known, this people, men, women, and children, pushed westward to seek a new abiding-place. With horses, mules, and oxen, and vehicles of all sorts they swept out over the great plains, across burning wastes, climbed rugged mountains. Those too poor to own a team and wagon made two-wheeled carts, loaded them with their few possessions, and trudged on behind the others. Many sank into nameless graves on the way, but the remnant, emerging from Emigration Cañon, saw before them their goal, the Great Salt Lake.

But what a situation! Before them a Dead Sea; behind them mountains, barren plains, suffering, and death; between, a great plain covered with sage-brush, and perhaps a little greasewood and rabbit-brush. The rains fell not in quantity sufficient to raise crops — what should they do? Hold! Out from the cold, gray mountains come perennial streams. Cleared quickly was the ground, the few seeds planted, the streamlets turned so as to saturate the earth, and lo! the desert blossoms, and in place of sage-brush there are wheat and oats, and vegetables, and flowers. Death is beaten off — health and life preserved.

In 1870 a band of intrepid men bought 3,000 acres of desert-land in Southern California, 300 miles from a railroad. These men purposed hewing out a new pathway to wealth. They eventually did it, but discouragements and failures well-nigh proved fatal. These were incident to a new enterprise where everything had to be learned, and as years wore on much unlearned. Steadily they progressed, and as the capabilities of the soil

and climate became known, and practical experience in irrigation gained, things came their way, and success beyond all expectation crowned their efforts. Riverside, Cal., is now known wherever oranges are eaten, and lands for which these pioneers paid in 1870, \$20 per acre, are now worth \$2,000 per acre.

At the same time that the Riverside pioneers were making their experiment, another was inaugurated on quite different lines, on the Colorado plains between Denver and Cheyenne. On the uplands above the Cache a la Poudre River, a company from the New England States established a town, and called it after the editor of the New York *Tribune*, Greeley. It was the first attempt to convey water upon high ground. Here again, much of the early work was experimental, but once they knew what they could and could not do, the rest was easy, and the wheat, and alfalfa, and potatoes of the Greeley irrigated lands are now famous.

These were the first three attempts at irrigation on a large scale. What they did has since been done all over the great West. The experiment is ended.

From the frowning gulches and slopes of the Cascade Mountains in Eastern Washington, are gathered the headwaters of a large and beautiful river. Flowing in a general southeastern direction for 170 miles or more, it ends its life by sweeping out into the larger and mightier Columbia.

The valley through which it flows rises from 300 to 350 feet above sea-level at the Columbia, to 1,500 or 2,000 feet near the base of the mountains. The decrease in altitude from northwest to southeast is quite regular.

The climate is slightly varied in proportion. The seasons of crop-growth are long; the summer days hot, but dry, and not oppressive; the nights cool. In winter the mercury seldom drops below 20° above zero. Frost may come October 1st, and linger until May 1st, but is not severe.

At one time a flow of basalt spread over much country, and cooling left long lines of hills and cliffs. Erosion has rounded these hills and washed from them large amounts of material — volcanic ash — forming a soil of great depth, fifty feet and more, of marvelous fertility.

These lines of hills are usually many miles apart, but occasionally come close together, thus dividing the valley into basins.

Through these ridges the river has cut its way, at one place in a cañon twenty miles long and very interesting. At the southern end the cliffs have widened out, leaving a long and wide delta bordering the Columbia River.

From almost any point of this valley the distant Cascades, with the gleaming, snowy peaks of Mounts Tacoma, Adams, etc., can be seen.

From every consideration of soil, climate, elevation, water-supply, acre-

age, location, and scenery, it would seem that the valley of the Yakima River—for such this is—was an ideal one for irrigation. It is.

Emboldened by the success of irrigation schemes elsewhere, the few settlers in the upper portions of the valley many years ago constructed canals. With the experiences of Utah, Riverside, Pasadena, Greeley, etc., the experiments and disheartening features of these enterprises were avoided, and success came easily. The results are astonishing.

The first wide expansion of the Yakima Valley is known as the Kittitas. It is a park-land, with fields and meadows, diversified by woodland, and with irrigating canals traversing it. The crops of wheat, oats, timothy, alfalfa, potatoes, etc., are enormous. Wheat runs as high as 50 bushels per acre; oats, 75 to 100 bushels; potatoes, 300 to 500 bushels.

The next basin is around the city of North Yakima. At this point a number of affluent streams flow into the Yakima River, and much of the land in the neighborhood is under irrigation, or soon will be. Several private canals have been constructed, and some large, admirably arranged and managed farms are found here. Artesian wells have been successfully sunk in this locality above the line of canal irrigation.

Below the North Yakima district is the Sunnyside country. Here it is nearly all virgin soil, and great are the developments that will be made. A monster canal over 60 miles long is being dug, and over 40 miles of main canal, 14 miles of branches, and 150 miles of laterals are now in operation. This canal is 62 feet wide at the top, 30 feet at the bottom, and will carry 8 feet of water—a small river. There are tributary to this canal more than 60,000 acres of magnificent lands.

Along the Columbia River are the deltaic lands of the Yakima, in the Kennewick region. Again, we find a wide area of arable land, heretofore growing only sage-brush and supporting only jack-rabbits, and fifty miles or more of large canals from which to irrigate them.

Altogether there are over half a million acres of land in this valley capable of irrigation. Along the entire length of it runs the Northern Pacific Railroad, opening to it the markets of Puget Sound, the Idaho and Montana mining regions, and through St. Paul and Minneapolis, the East.

In the winter of 1893 I hied me away to view this land of vine and orchard, to see the hop and alfalfa fields reclaimed from a dusty waste. The prairies of Minnesota and North Dakota were white in their covering of newly fallen snow. Beyond them I was borne rapidly over the eternal Rockies, beautiful and grand in their mottled garb of tree-green, gray rocks, and snow-spots upon peak and in ravine. Still onward over the Spokane plain, where the rain was gently falling upon housetop and street in city and hamlet, and upon rock and stunted bush on hill or in hollow. And yet farther I went, until the dim outlines of the Cascades rose before

me, and my journey was finished, and I stood in the midst of — what? Aye! well may I ask — what?

What would you call it, to stand where for miles the sight of sage-brush greeted your eye, and its pungent aroma was inhaled by the nostril, while scattered about you were green fields of alfalfa, with long, low stacks of it waiting the ground; where piles of recumbent poles and the peculiar drying-houses betokened the great hop-fields of summer; where long rows of well-trimmed vines spoke of luscious grapes; where orchards were seen in all the different stages of growth, from the slender yearling to the sturdy, wide-branching tree of six and seven years; and high above all, creeping insidiously around the foothills, a huge water-snake, ran the hand-made river that brought about this inconsistency — what, I say, would *you* call it? It is not desert, it is not farm — it *is* desert, it *is* farm. An odd intermingling of the wild and the tame, the uncivilized and the civilized.

As I saw men plowing on Christmas-day; watched school-children bareheaded playing base-ball; looked upon a wonderful peach orchard of 100 acres; saw cherry-trees where the third year's growth alone could be seen to be from five to eleven feet, and then went myself and dug potatoes, and descended into cellars and saw the great pears and apples, and the dried prunes of enormous size, and the yellow ears of dent corn in the cribs, verily I thought this a land where to know it fully and honestly one must journey there to see these things.

What possibilities lay before this vale. In five, ten years what would it be? And then I dreamed. Again I was standing where long before I had stood. Around me, dotting the erstwhile sage-brush plain, were many little cities. A wilderness of small farms greeted me. For every sage-bush that I had seen years before a fruit-tree now rose before me. Roads that were bordered by running water and shaded by graceful trees, wound over the valley and hills. Green alfalfa-fields, bushy hop-vines, an interminable array of orchards, yellow grain-patches, made of the valley a huge checker-board, while the foothills and knolls were covered with vineyards or berry-patches. Houses of tasteful architecture, with fresh lawns, and flower-beds, and shade-trees, were everywhere. School-houses without number and graceful church-steeple rose from out the green orchards and fields. The plain itself was a rustic city, and within it were other and more compact cities. The roads echoed to the sound of vehicles wheeling the products of tree, and vine, and field, to the central marts, from whence they were shipped to the remote centers of the land. What caused it? Irrigation, they said. Its effects were marvelous. Every man whose farm I saw before me was independent. Health and wealth went hand in hand, and irrigation was their handmaiden.

DAVIDSON GLACIER.



MUIR GLACIER.



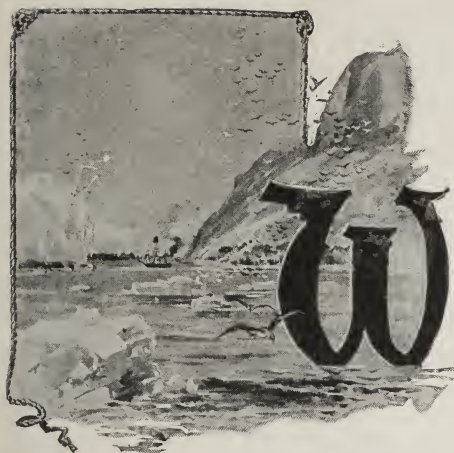
PYRAMID BAY.





INDIAN AVENUE, SITKA, ALASKA.

ALASKA.



THE AMERICAN ICELAND—WONDERFUL SCENERY—A LAND OF ICE AND SNOW.

HEN a lad attending public school the geographies told of a certain Russian America. It seemed as if it was away out of the world, and that it never could or would be anywhere else. Think of the wonders and changes wrought by time! A geography that could now be found that mentioned Russian

America would be like old furniture—prized as a relic and antique. Russian America has gone, Alaska has come. The change took place in May, 1867, and it cost \$7,200,000 gold—no silver or greenbacks in that deal—to make the change.

The word Alaska is a corruption or modification of an aboriginal word, "Al-ak-shak," which means great continent, and inasmuch as the name comprehends nearly 600,000 square miles of ice, and snow, and earth, and water, and mountains, and rivers, and forests, and Indians, it would seem to fill the bill most satisfactorily. So, at any rate, Senator Sumner thought, for to him is credited the name as now applied.

It was pretty generally thought at the time that we were paying very dear for our whistle—\$7,200,000 was a pile of gold, and ought to procure a whistle of an unusually fine sort. There was a vague notion among those who knew nothing about it—and they were ninety-nine out of a hundred—that the principal crops raised were polar bears and icebergs, with a few seals thrown in, and a few stunted Indians to eat them.

The country is large enough in all conscience. Its extreme length is over 2,000 miles, and its width 1,400 miles and more. Its shore-line is computed at between two and three times the coast-line of the United States on the Atlantic and Pacific exclusive of Alaska itself.

We now know that in buying Alaska we obtained a great bargain, especially as we had our international complications with Great Britain thrown in. We now know that nowhere in the world is there such magnificent ice scenery, such profusion of unbelievable wonders as in this "land of mist and snow."

Oh! it is a feast for the gods, this kingdom of ice and snow, where the Ice King has his clutches on land and sea, and casts a mysterious spell and beauty o'er all the earth around.

The traveler who desires to take this trip, so resplendent of scenes and experiences novel and charming, can obtain round-trip tickets from St. Paul and Duluth, via the Northern Pacific, to Sitka and return, and reserve berths on steamer, etc., before reaching Tacoma, the port of departure for steamers. The length of time required for the trip, if made by the steamer *Queen*, a comfortable steamer, is about twelve days Tacoma to Sitka and return; by the other steamers, about nineteen days.

Among the more interesting points of the Alaskan tour are Patterson Glacier, near Fort Wrangel; Taku Inlet and Glacier, and the Auk and Eagle glaciers, near Juneau; the Davidson Glacier, near Chilkat, and Muir Glacier at Glacier Bay. At Glacier Bay the mountains reach their culminating power, rising from 15,500 feet for Mount Fairweather to 16,000 feet for Mount Crillon.

Sessions says of the Auk and Eagle glaciers, "The great Auk Glacier was first seen, and then the Eagle Glacier, toppling over a precipice 3,000 feet in air, their frozen crests and fronts turning pinnacles of silver and azure to the radiant sun."

Three men are to be credited with the great bulk of recent reliable information we have of this region: John Muir of California, after whom Muir Glacier is named; Professor Davidson of the United States Coast Survey, for whom Davidson Glacier was called; and Prof. G. Frederick Wright of Oberlin, Ohio, who is one of the most profound students of glacial geology in the country. The latter states that Muir Glacier tumbles into Glacier Bay every twenty-four hours 149,000,000 cubic feet of ice.

The profound work of Dr. W. H. Dall of Washington, on Alaska, written years ago, is still the most complete account of this region extant.

Kate Field says of the Muir glacier, "Imagine Niagara Falls frozen a solid wall of ice, 300 feet high, moving toward the ocean, and a similar wall six or seven hundred feet under water, and the whole mass cracking and giving forth peals of thunder that rival the heavenly artillery, and every few moments thousands of tons of lovely blue ice crashing into the sea and starting on a voyage as icebergs—a peril to the Arctic voyager—and you will have some slight conception of this imposing spectacle."

Rainbow Glacier, in Lynn Channel, is so called "from the fact that the ice in falling and crashing from a tremendous height into the channel below, gorges in the form of an arch, in which in the sunshine, is reflected all the colors and tints of the rainbow, and which forms a sight of grandeur once seen never to be forgotten."

Prof. Horace Briggs thus writes of a trip over the surface of the Muir Glacier, "Blocks of finest marble hedged our pathway; we trod upon chips of jasper and chalcedony, the product of different mountains far up on the peninsula, and we passed two exquisitely beautiful boulders of veined porphyry weighing two or three hundred pounds each, rounded and polished by centuries of attrition."

And again, "The larger portion of this crystal river, perhaps an eighth of a mile in width, is heaved into rounded hills and beetling precipices, quite resembling the sea in a storm, while the middle and much of the wider part is splintered into countless spires and needles and pinnacles, ten, twenty, and thirty feet in height, and of a beautiful ultramarine at the base, shaded to a pure white at the summit.

"In the onward march of the glacier these pinnacles are occasionally wrenched from their seats in the solid ice beneath; they nod, then totter, and then make a plunge, and are shattered into a cloud of acicular crystals that sparkle like the frosted snow under a full moon of a winter's night, only with more of color; they are diamonds on the wing." The latest investigations by Professor Reid would indicate that within the last few years very material changes have taken place in the extent and recession of this glacier.

The impression made upon every one that takes this trip seems to be that of all trips under the sun this is the crowning one.

NORTHERN PACIFIC R. R.

Rates and Arrangements for the Tourist Season.

MINNESOTA SUMMER RESORTS.—The Northern Pacific Railroad will sell round-trip excursion tickets from St. Paul or Minneapolis to Glenwood (Lake Minnawaska) at \$5.25; Battle Lake, \$7.50; Fergus Falls, \$7.50; Perham, \$7.75; Detroit Lake, \$9.15; Minnewaukan (Devil's Lake), \$18.65; Winnipeg, \$22.50. From Duluth or Superior to Deerwood, \$3.80; Battle Lake, \$7.50; Fergus Falls, \$7.50; Perham, \$7.75; Detroit Lake, \$9.15; Minnewaukan, \$18.65; Winnipeg, \$22.50. From Ashland, Wis., to Battle Lake, \$9; Fergus Falls, \$9; Perham, \$9.25; Detroit Lake, \$10.65; Minnewaukan, \$20.15; Winnipeg, \$22.50. Tickets on sale May 1st to September 30th, inclusive. Good going to Minnesota resorts one day (from Ashland two days), to Minnewaukan (Devil's Lake) and Winnipeg two days from date of sale. Good to return on or before October 31st.

YELLOWSTONE PARK RATES.—The Northern Pacific Railroad, the only rail line to the Park, will sell round-trip excursion tickets from May 29th to September 28th (both dates inclusive) at the following rates:

A \$130 ticket, including the following traveling expenses, from St. Paul, Minneapolis, or Duluth on the east, and Portland, Tacoma, or Seattle on the west, to and through the Park (including Yellowstone Lake) and return to starting point, viz.: Railroad and stage transportation, Pullman sleeping car fares, meals on Northern Pacific dining cars, and board and lodging at the Park Association Hotels six days.

A \$50 round-trip ticket, St. Paul, Minneapolis, or Duluth to Livingston and return.

A \$12.50 ticket, Livingston to Mammoth Hot Springs Hotel and return, including rail and stage transportation, and one day's board at Mammoth Hot Springs.

A \$65 ticket, Livingston to Cinnabar and return, Cinnabar to Mammoth Hot Springs, Norris, Lower and Upper Geyser Basins, Yellowstone Lake, Grand Cañon and Falls of the Yellowstone and return, including rail and stage transportation, and six days' accommodations at the Association Hotels.

Limit and Conditions of Tickets.—The \$130 ticket will be on sale, at eastern and western termini named, May 29th to September 28th, inclusive; by eastern lines, May 28th to September 27th, limit forty days; good going thirty days, returning ten days, but must be used in the Park before October 6th. Stop-overs within final limit at or east of Billings, and at or west of Helena. Return portion of ticket must be signed and stamped at Mammoth Hot Springs Hotel, after which ticket must be presented on main line train for return passage within one day from such date. Stop-overs in Park granted at pleasure of holder within final limit of ticket.

Limit of \$50 rail ticket, same as above. Stop-over privileges allowed within limits. Return portion of ticket must be stamped and signed at Livingston ticket office.

The \$12.50 and \$65 tickets, on sale at eastern and western termini between dates first named above, at Livingston May 31st to September 30th, both dates inclusive, are good if used in the Park any time between June 1st and October 6th, both dates inclusive, and do not require identification of purchaser.

The hotel service in the Park is now very complete. Tourists can stop at any of the principal points of interest with the assurance that comfortable accommodations will be supplied them.

MONTANA AND EASTERN WASHINGTON POINTS.—The Northern Pacific Railroad sells daily, from St. Paul, Minneapolis, or Duluth, round-trip excursion tickets to Bozeman at \$55; Helena and Butte, \$60 (choice of routes returning, via Northern Pacific, Union Pacific, or Great Northern Railway lines); Missoula, \$62.50; Spokane, \$70 (choice of routes returning, via Union Pacific, Great Northern, or Northern Pacific lines); Medical Lake, \$70; and Nelson, B. C., and Kaslo, B. C., \$70.

These tickets are of iron-clad signature form; require identification of purchaser at return starting-point, limited to ninety days, good going forty days and returning forty days. Stop-overs granted at any point within limits stated.

To Springdale (Hunter's Hot Springs), Mont., and return, \$50; on sale daily; good forty days—going limit thirty days, return limit ten days.

NORTH PACIFIC COAST EXCURSIONS.—An \$80 round-trip individual excursion ticket, St. Paul, Minneapolis, or Duluth to Tacoma, Portland, Seattle, Vancouver, or Victoria, is on sale daily at points first named and by eastern lines.

Tacoma, Seattle, Victoria, Vancouver, or Portland tickets, at above rates, will be issued, going via Northern Pacific, returning via same route or Great Northern or Soo-Pacific lines; or via Canadian Pacific Railway to Winnipeg or Port Arthur; Portland tickets will also be issued, returning via Union Pacific to either Omaha or Kansas City, or to St. Paul via Union Pacific Railway through Sioux City.

CONDITIONS.—Above tickets limited to nine months from date of sale; good, going trip, sixty days to any one of North Pacific Coast termini named, returning any time within final limit.

ALASKA EXCURSIONS.—An excursion ticket will be sold from eastern termini named to Sitka, Alaska, at \$175, which rate includes meals and berth on the steamer. Tickets on sale May 1st to September 30th. Limit nine months. Going to Tacoma, sixty days, returning within final limit, holder to leave Sitka on or before October 31st. Tickets will be issued to return either via the Northern Pacific, Soo-Pacific, or Great Northern lines to St. Paul or Minneapolis, or via Canadian Pacific Railway to Winnipeg or Port Arthur. Usual stop-over privileges granted. Steamer accommodations can be secured in advance by application to any of the agents named below. Diagrams of steamers at office of General Passenger Agent at St. Paul.

"TO THE WESTWARD."—The Northern American Commercial Company's mail steamer *Crescent City* will sail from Sitka for Dutch Harbor in Behring Sea, 1,500 miles distant, 4th of April, May, and June. After July 1st the Alaska Commercial Company's steamer *Dora* will make trips in July, August, September, and October, sailing from Sitka for Unalaska, stopping at Kodiak and Prince William's Sound. Close connection is made with the Pacific Coast Steamship Company's vessels *City of Topeka* and *Queen*. The steamers *Crescent City* and *Dora* have accommodations for twenty-two to twenty-six cabin passengers. Round trip is made in from twenty-seven to thirty days, one week of which time is spent at Dutch Harbor or Unalaska, from which points a side trip is made to the Bogoslov Volcano, forty miles distant. Round-trip rate from Sitka, including berth and meals on boat and board and lodging at the North American Fur Trading Company's new station at Dutch Harbor, \$120.

A NOTABLE BOOK.—Perhaps the most interesting book yet written on Alaska is that from the pen of Mrs. General C. H. T. Collis, bearing the title "A Woman's Trip to Alaska," from the press of the Cassell Publishing Company, New York.

CALIFORNIA EXCURSION RATES.—The Northern Pacific Railroad will sell round-trip excursion tickets from St. Paul, Minneapolis, or Duluth, as follows:

To San Francisco, going via the Northern Pacific to Portland, and the Shasta route or the ocean to San Francisco; returning via rail or steamer and the Northern Pacific, Great Northern, or Soo-Pacific lines, or returning by the southern lines to Council Bluffs, Omaha, Kansas City, Mineola, or Houston, at \$95; to New Orleans or St. Louis, at \$101.

To Los Angeles, going via Portland and Shasta route, and returning via rail, Portland and the Northern Pacific, Great Northern, or Soo-Pacific lines, into San Francisco in one direction, at \$114; or going via Portland and Shasta route and returning via Sacramento and Ogden to Council Bluffs, Omaha, or Kansas City, at \$104.50; to St. Louis, at \$110.50.

To San Diego going via Portland, and rail through Los Angeles, and returning via rail, Portland and the Northern Pacific, Great Northern, or Soo-Pacific lines, into San Francisco in one direction, at \$124; or going via Portland and Shasta route, and returning via Sacramento and Ogden to Council Bluffs, Omaha, or Kansas City, or via southern lines to Kansas City, Mineola, or Houston, at \$109.50; to St. Louis at \$115.50.

Tickets returning from Los Angeles or San Diego, via Ogden, will be issued reading via San Francisco and Ogden, at rates \$4 higher than returning via Sacramento and Ogden. Tickets via ocean include meals and berth on steamer.

At the eastern termini of the southern transcontinental lines, excursion tickets will be sold, or orders exchanged, for tickets to San Francisco, returning via either the Shasta route, the all-rail line to Portland, or the ocean and the Northern Pacific to St. Paul, Minneapolis, Duluth, or Ashland, at a rate \$15 higher than the current excursion rate in effect between Missouri River points, Mineola or Houston and San Francisco. The steamship coupon includes first-class cabin passage and meals between San Francisco and Portland.

Return coupons reading from Missouri River points to Chicago or St. Louis will be honored from St. Paul or Minneapolis, either free, or with a small additional charge according to route.

These excursion tickets allow nine months' time for the round trip; sixty days allowed for west-bound trip up to first Pacific Coast common point; return any time within final limit.

**General
and Special
Agents.**

B. N. AUSTIN, Assistant General Passenger Agent, St. Paul, Minn.
A. L. CRAIG, Assistant General Ticket Agent, St. Paul, Minn.
A. D. CHARLTON, Assistant General Passenger Agent, 121 First St., Portland, Ore.
F. H. FOGARTY, General Agent, 210 South Clark St., Chicago, Ill.
GEO. R. FITCH, General Eastern Agent, 319 Broadway, New York City, N. Y.
A. D. EDGAR, General Agent, Corner Main and Grand Streets, Helena, Mont.
W. M. TUOHY, General Agent, 23 East Broadway, Butte, Mont.
R. A. EVA, General Agent, Duluth, Minn.
H. SWINFORD, General Agent, Railway Station, Water Street, Winnipeg, Manitoba
G. G. CHANDLER, General Agent, 621 Pacific Avenue, Tacoma, Wash.
I. A. NADEAU, General Agent, Seattle, Wash.
A. TINLING, General Agent, Spokane, Wash.
T. K. STATELER, General Agent, Pass. Dept., 638 Market St., San Francisco, Cal.

**District
Passenger
Agents.**

W. N. MEARS, 15 State Street, Boston, Mass.
J. H. ROGERS, JR., 47 South Third Street, Philadelphia, Pa.
L. L. BILLINGSLEA, 47 South Third Street, Philadelphia, Pa.
WM. G. MASON, 44 Exchange Street, Buffalo, N. Y.
JNO. E. TURNER, 42 Jackson Place, Indianapolis, Ind.
W. H. WHITAKER, 153 Jefferson Avenue, Detroit, Mich.
P. H. NOEL, 103 North Broadway, St. Louis, Mo.
J. J. FERRY, Room 32 Carew Building, Fifth and Vine Sts., Cincinnati, Ohio
T. S. PATTY, Read House, Chattanooga, Tenn.
J. N. ROBINSON, 99 Wisconsin Street, Milwaukee, Wis.
OSCAR VANDERBILT, 403 West Locust Street, Des Moines, Iowa.
THOS. HENRY, 128 St. James Street, Montreal, Canada.
C. G. LEMMON, 210 South Clark Street, Chicago, Ill.
FRANK O'NEILL, 121 First Street, Portland, Ore.
E. L. RAYBURN, 121 First Street, Portland, Ore.
CHAS. E. JOHNSON, St. Paul, Minn.
R. W. GLADING, Thomasville, Ga.

J. M. HANNAFORD,
General Traffic Manager,

CHAS. S. FEE,
General Passenger and Ticket Agent,
ST. PAUL, MINN.

BRIGHAM YOUNG UNIVERSITY



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